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# HMM

**MALAYSIA**

MARCH 2015 // RM12 (WM) RM14 (EM) //  
VOL 13 ISSUE 4

**THE POWER TO DECIDE**

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# GOING WITH INK

INKJET MFPS FOR  
YOUR SOHO

**TEST**

**LENOVO  
VIBE X2**

MULTI-LAYERED  
INGENUITY

**MSI GT80  
TITAN**

MIGHTIEST OF  
THEM ALL?

PP 18407/03/2014(033808) ISSN 1675-4883




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Philips Fidelio  
Headphones  
L2



**PHILIPS**  
**Fidelio**





Stereo to surround sound in seconds with detachable speakers

### Highlights



Surround on Demand



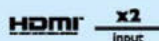
Spatial calibration



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Stand-alone portable speakers



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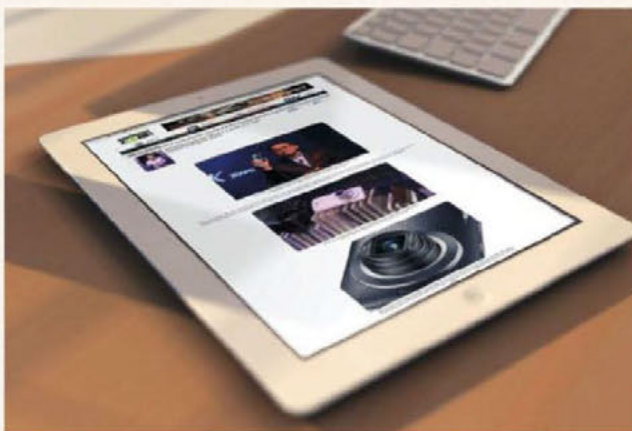






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## POST-CNY BLUES

Oh, February... In addition to being the shortest month of the year, it also brought along a long weekend of festivities, courtesy of the Chinese New Year. Whether it's spent rekindling with loved ones, holidaying abroad, or binging on the good stuff, chances are you've experienced some semblance of post-CNY blues upon returning to work or school.

With the 15-day celebration officially over, it's time to face the music and by that, we meant holding on to your New Year's resolution of leading a healthier lifestyle, but we digress. For everyone else who is excited to get back into the thick of things, boy, do we have just the thing for you.

This month, we have two shootouts that are all about volume and productivity, specifically inkjet multi-function printers for your small office/home office and the new wave of AC-2400 wireless routers available today. But that's not all, as we also prepared double-page reviews of Xiaomi's recently announced Mi Note and HTC's selfie-driven Desire EYE smartphone. And for the gaming inclined, there's the equally extensive

review on the MSI GT80 Titan, famed for integrating a mechanical keyboard with Cherry MX switches into an 18-inch mobile gaming machine.

On the photography front, we offer tips on how you can discover and develop your very own photography style, while also giving our two cents on FUJIFILM's latest retro-styled X30 premium compact camera.

We hope you'll enjoy what we have in store for you this issue, and be sure to look out for the April 2015 edition of HWM Malaysia!

*Michael Low*  
EDITOR

**Correction:** In our review of Gigabyte GeForce GTX 960 WINDFORCE 2X OC Edition (published February 2015), we mentioned that the fans on the card will only spin once the temperature goes above 62-degree Celsius.

Gigabyte has clarified that the fan will start to spin when the GPU's temperature is over 59-degree Celsius, and will stop once it goes under 37-degree Celsius. – Ed.





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*Rongroj Yongrit*

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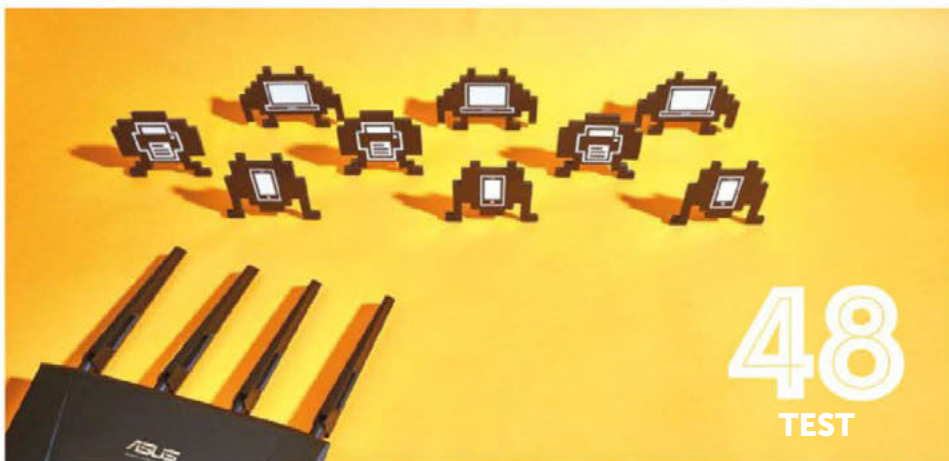
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# NEW THIS MONTH

Every month, we receive dozens of product announcements and mentions, sit through many a launch event and try out all kinds of devices. All these products are then carefully curated by our crack team of tech gurus. The final list is presented here in Gear and it is our hope you'll find something to geek-out to.



**MORE  
INSIDE >**  
**PHILIPS M100D**  
Watch over your home.

**CANON POWERSHOT  
N2**  
Made for selfie lovers.

**ALIENWARE 17**  
Big screen, big performance.

**MICROSOFT HOLOLENS**  
This is the future.

## CANON EOS 5DS R

Canon's answer to the megapixel war is its brand new EOS 5DS R, which boasts a massive 50.6MP full-frame sensor – the highest in its class for ultra-sharp images, no matter the subjects. There's more to the camera too, as it features the latest DIGIC 6 image processor, 61 AF points, cropped shooting mode, and a selection of intelligent modes found in the recent EOS 7D Mark II. The presence of a low-pass cancellation filter maximizes the sensor's full potential.

Canon Marketing (M) Sdn Bhd 1 800 88 2000



## PHILIPS M100D

There's nothing worse than leaving home for a vacation only to constantly worry about the security of your home.

With the M100D, you will be able to monitor your home wirelessly via the free Philips InSight app on your iPhone or iPad. There is also no need to constantly check your phone or tablet, as you will automatically receive a push notification the moment the camera detects motion or noise.

Woox Innovations 1 800 880 180







## SAMSUNG GALAXY A7

The Samsung GALAXY A7 is one of the company's slimmest smartphones, boasting a thinness of just 6.3mm. Powering the A7 is the Qualcomm Snapdragon 615 SoC that utilizes an octa-core CPU to manage data-intensive tasks, while the 2GB of RAM ensures that you always have a silky-smooth user experience. If selfies are your thing, then you'll have the creative 'Wide Selfie' and 'Palm Selfie' modes to make the best of the 5MP front-facing camera. Don't worry, the built-in 2,600mAh battery has enough juice for you to take selfies throughout the day.

Samsung Careline 1 800 88 9999

## CANON POWERSHOT N2

The N2 replaces its predecessor, yet maintains the compact, square form factor for capturing selfies and spontaneous moments. Built-in Wi-Fi and NFC makes photo sharing easy, while the 16.1MP CMOS sensor, DIGIC 6 processor, and 8x optical zoom lens ensure images turn out beautifully with accurate colors and rich details. There's also the Creative Shot mode and a 2.8-inch touchscreen LCD that flips 180 degrees to show off your creative flair.

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## ACER ASPIRE R 14

If you're looking for a high-performance convertible Windows 8.1 notebook, you may want to consider the Aspire R 14. The 14-inch machine comes with a 360-degree, dual-torque hinge design that transforms it into four versatile modes. It's also built for touch, offering impressive image clarity on the Zero Air Gap touchscreen LCD, along with Acer Touch Tools and the precision touchpad.

Acer Sales and Marketing Sdn Bhd  
1 800 88 1288





## ALIENWARE 17

The new Alienware 17 is all about massive screen and the performance to match. The carbon-fiber construction makes it sturdy and stylish, the copper heat sinks keep it cool, and the Intel Core i7 processor, as well as NVIDIA GeForce GTX 900M series graphics, maximize the visual fidelity of today's hottest games when experienced on the 17.3-inch Full HD display, which is also available in a touch variant. Also supports the optional Alienware Graphics Amplifier.

Dell Sales Malaysia Sdn Bhd 1 800 88 0301





## KINGSTON HYPERX CLOUD II

The highlight of the HyperX Cloud II gaming headset is definitely its USB sound card, which comes with a button that allows users to effortlessly switch to virtual 7.1 surround sound.

When connected to the USB sound card, the headset's microphone will be digitally enhanced with noise cancellation, auto gain control and echo cancellation. To ensure consistent comfort throughout your gaming sessions, the ear cups and headband are made with 100% memory foam. Best of all, it's compatible with PC, Mac, PS4 and Xbox One.

Amble Action Sdn Bhd (03) 7968 6899 /  
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## MICROSOFT HOLOLENS

Going beyond the confines of VR goggles, the HoloLens intends to bring holographic technology into the real world. Imagine three dimensional objects that you can interact with your hands. And it's not just limited to interacting with menus; think design, productivity, entertainment and gaming. Now, this is the future.

[www.microsoft.com](http://www.microsoft.com)



Alienware recommends Windows.

**ALIENWARE** 

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## ASUS TRANSFORMER BOOK T300 CHI

The Transformer Book T300 Chi is a sexy 2-in-1 detachable convertible powered by Intel Core M processors. It is built with a gorgeous, all-aluminum razor thin profile with a fanless design. The T300 is as fast as it is silent. Plus with its 12.5-inch WQHD (2,560 x 1,440) IPS multi-touch display, expect to be blown away with gorgeous visuals.

Dynamics Distribution Sdn Bhd (03) 8024 2100/  
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*"Goodbye password, hello single touch"*



### SAMSUNG GALAXY NOTE 4 – BLOSSOM PINK

The GALAXY Note 4 is now available in a new color: Blossom Pink. Coupled with its already impressive 2.7GHz Qualcomm Snapdragon 805 quad-core processor and 3GB of RAM, this variation of the GALAXY Note 4 is the perfect gift for the lady that deserves everything and more.

📞 Samsung Careline 1 800 88 7799



### COLOUD SPORTS' THE SNAP

The Snap's unique design lets in just enough ambient noise without sacrificing audio quality; important for runners who need to remain aware of the traffic around them. With front and back vents specifically tuned for full-range sound and the implementation of a flat cable with Zound Lasso to keep things tangle free, The Snap makes the perfect exercise partner.

[www.coloud.com](http://www.coloud.com)



### CANON EOS M3

The third iteration to the EOS M series fuses Canon's new 24.2MP APS-C CMOS sensor with DIGIC 6 image processor and Hybrid CMOS AF III to capture beautiful images with intuitive DSLR-like controls in a compact camera body. Frame your composition with the highly-articulating 3.0-inch LCD touchscreen, along with flexible features like Creative Assist, Touch AF, as well as integrated Wi-Fi and NFC.

📞 Canon Marketing (M) Sdn Bhd 1 800 88 2000



### ASUS FONEPAD 7

In addition to a sexy new design, the refreshed Fonepad 7 features a 7-inch IPS display with TruVivid technology, and even comes with a dual-core Intel Atom processor. It's also got a Dual SIM configuration, which makes this the ideal business and traveling companion for out-of-state coverage.

📞 Dynamics Distribution Sdn Bhd (03) 8024 2100

📞 Servex (M) Sdn Bhd (03) 8024 6688



### CANON EOS 760D

One of Canon's follow-ups to the entry-level EOS DSLR lineup is the EOS 760D, which packs the capable 24.2MP APS-C sensor, DIGIC 6 processor and Flicker Detection technology to deliver consistently exposed images – no matter the lighting conditions. Its 19-point AF system provides fast, precise focusing, while built-in Wi-Fi and NFC allows for remote shooting and easy photo sharing, respectively.

Canon Marketing (M) Sdn Bhd 1 800 88 2000



### SAMSUNG NX500

With the NX500, no longer will you have to bear with taking sub-par photos. The on-board DRiMeV imaging processor will ensure that the photos you take will showcase better colors, lesser noise, and enhanced image quality. Furthermore, with the 28MP backside-illuminated APS-C sensor working in tandem with the NX AF System III, you can confidently take photos that are tack sharp, even in low-light situations.

Samsung Careline 1 800 88 9999

### AMAZON ECHO

The Amazon Echo is a black cylindrical device that serves as your own personal assistant. Want to know the latest news, weather, music or other information in general? Just ask away, you will get your answers instantly. Plus, the Echo has dual downward firing speakers that produce 360° omni-directional audio to guarantee that the music you stream via Bluetooth will sound impeccable.

[www.amazon.com](http://www.amazon.com)



### SONY PHA-1A

Sony's latest portable DAC and headphone amplifier, the PHA-1A has a frequency range of 10Hz-100,000Hz, and will support headphones with impedance of up to 600Ω. It weighs just 145g, and has a battery life of about six hours while needing only two hours for a full recharge, so simply hook your laptop, tablet or portable media device up via the PHA-1A's USB input and you're good to go!

[www.sony.com.my](http://www.sony.com.my)

### ASUS STRIX GEFORCE GTX 960 DIRECTCU II OC EDITION

The ASUS STRIX GeForce GTX 960 Direct CUII OC Edition is one of many variations of NVIDIA's latest midrange graphics cards that hit the sweet spot in gaming. Even with low-power consumption, it has 2GB of GDDR5 graphics memory, boost clocked to 1,316MHz.

📍 Build Technology Supply Sdn Bhd (03) 7955 3699

📍 Servex (M) Sdn Bhd (03) 8024 6688



### LINKSYS SE4008

The Linksys SE4008 is an 8-port Gigabit Ethernet switch that allows for wired connection speeds of up to 1,000Mbps. Quality of Service (QoS) technology constantly prioritizes traffic to ensure stable speeds. When a connected device is turned off or when there are ports that are not in use, the SE4008 will automatically power down into an energy-saving mode.

📍 Glocomp Systems Malaysia Sdn Bhd (03) 7652 1188



### TEAM ELITE+ U-DIMM DDR4 2400

The latest Elite+ DDR4 memory kit from Team Group runs at a frequency of 2,400MHz, carrying a CAS latency of 16 (16-16-16-39) at a voltage of 1.2V. Designed for Intel X99 series chipset, the memory kit comes in various dual- and quad-channel configurations, with capacities up to 16GB (2x 8GB) and backed by a lifetime warranty.

📍 M-Link System (M) Sdn Bhd (03) 6143 0888

### AORUS X5

At the recent CES 2015, AORUS introduced a brand new X5 built with dual GTX 965M graphics and a 15.6-inch display. Weighing at 2.5kg, it is simply unbeatable in terms of performance-to-size ratio. Another feature that sets the X5 apart from the competition is also its 4K/UHD IGZO display, which delivers ultra-high pixels and stunning details for unparalleled viewing experience when gaming.

📍 ILLEGear Sdn Bhd (03) 7610 0987





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### ASROCK VISIONX 471D

Sleek, light and powerful – these three words best described the ASRock VisionX 471D. This compact HTPC boasts an Intel Core i7-4712MQ processor, along with 8GB of DDR3 memory, AMD Radeon R9 M270X graphics, a 2TB hard drive, plus 256GB mSATA SSD, and a DVD Super Multi drive. Connectivity-wise, it supports Bluetooth 4.0, Wireless-AC, and a plethora of I/O ports.

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### SAPPHIRE R9 290X TRI-X 8GB

Sapphire follows up on its Vapor-X offering with another 8GB R9 290X card, this time sporting the exclusive Tri-X design. The triple-fan card is memory clocked at 1,375MHz (5.5GHz effective), with a 6-phase power design that delivers up to 240W for improved bandwidth and performance over earlier models. Dual BIOS support allows both UEFI and legacy BIOS boot modes.

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### TP-LINK ARCHER C2

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### HANNSPREE MICRO PC

With its flash drive-sized physique, it's no surprise that the Hannspree Micro PC is one of the smallest computers in the market. Delve deeper into this Micro PC and you'll find a 1.83GHz Intel Atom Z3735F processor (with Intel HD Graphics), 2GB of DDR3 RAM, 32GB of eMMC storage space and a copy of Windows 8.1 with Bing. Connectivity-wise, it has 802.11b/g/n WiFi, Bluetooth 4.0, a Micro-USB port, a USB 2.0 port and a microSD card reader.

[www.hannspree.eu](http://www.hannspree.eu)







THINK

# SMART OLD WATCHES

Smartwatches have been dubbed as the next big thing in technology, but the truth is we have seen very little innovation on that front. On the other hand, there has been no shortage of ingenious new inventions where traditional mechanical watches are concerned.

Text by *Kenny Yeo*

## MORE INSIDE> TECH BREAKUPS

Large corporations acquiring and buying over smaller companies to grow their business are a norm, but the opposite is also true. Some giants have taken to breaking down into smaller, more nimble entities as a strategy.

# TICKING AHEAD.

Fueled by the need to remain relevant in the face of the impending threat of smartwatches, and also the need to differentiate themselves because of increasingly educated and discerning consumers, makers of traditional mechanical watches are looking at ways to innovate to stay ahead of both the competition and the curve.

by *Kenny Yeo*



When Seiko launched the world's first quartz watch, the Astron, on Christmas Day in 1969, little did mechanical watch companies know what was to be in store for them. Back in 1969, the Astron was not cheap, but it was extremely accurate - many more times so than traditional mechanical watches. And to advance the technology, Seiko made the patents available to everyone and this led to widespread adoption of quartz technology, to the point where quartz watches could be made quickly and cheaply.

This had a profound effect on the mechanical watch industry and led to what is now known as the Quartz Crisis. The Swiss, who dominated much of the watch industry, were reluctant to make quartz watches, despite the patents being opened to all, as they saw it being an affront to their centuries-long tradition and craft. This would prove to be their downfall as the world soon came to embrace quartz technology, and many Swiss watch companies soon went bust.

To save the industry, the Swatch Group was formed in 1983 through the merger of ASUAG and SSIH. ASUAG was the world's largest producer of watch movements and parts, while SSIH was formed in the 1930s through the merger of Omega and Tissot. The Swatch Group then embarked on manufacturing the Swatch watches, which were inexpensive and colorful quartz watches that were designed to appeal to all age groups. These watches proved to be a success and would provide the stepping stone for mechanical watches to prosper again.

**"The mechanical watch industry now faces a new threat in the form of digital smartwatches."**

Today, the mechanical watch industry faces a new threat in the form of digital smartwatches. And it seems that not a day goes by without a new smartwatch being announced. However, if one were to examine smartwatches closely, you would find that there has been little real innovation there.

Much of today's smartwatches are nothing more than a secondary display for your smartphone. They prompt you when you get a call, text or email, and that's about it. Without a phone, they lose much of their functions. Standalone smartwatches with fully-functional cellular connectivity also exist, but the reason why smartphone displays are getting larger is because of the increasing rich media consumption on these devices. A smartwatch, with its tiny 1-inch screen and extremely limited battery doesn't address this usage pattern. Sports watches with built-in GPS are also increasingly popular, but most of the innovation in this space is actually on the software side - apps that better record and interpret your fitness data. Again, you'd require a smartphone, tablet or PC to actually run said apps; the watch itself is only half the equation.

So, innovation in the digital space is mostly limited to technological breakthroughs. Faster, speedier processors; sharper, higher quality displays, but we already expect this in all our tech gadgets. They aren't exclusive to smartwatches.

On the other hand, the mechanical watch industry has never been stronger. And there have been more innovations after the quartz crisis



than in the centuries that preceded it. Innovation here is driven largely by two factors. For one, there is a strong need for brands to differentiate themselves, especially in the high-end segment of the market. This is because their target audience is becoming increasingly educated and discerning. Value and innovation are key considerations when making purchases. Next, it helps that these firms are making vast profits thanks to the high margins on their watches. In 2013, Switzerland, where many mechanical watch manufacturers are based, exported over 28 million watches at an average price of US\$830 - but this number is heavily skewed by the large volume of cheap Swatch watches.

Ironically, the material that is at the heart of many mechanical watch innovations is silicon. This is the same element used to manufacture the processors that is powering untold billions of computers, notebooks, smartphones and tablets around the world. Mechanical watches are largely made up of metal parts, which are susceptible to magnetism, heat and cold, shock and wear. Silicon by virtue of being almost frictionless, hard and non-magnetic makes it the ideal material for watchmaking.

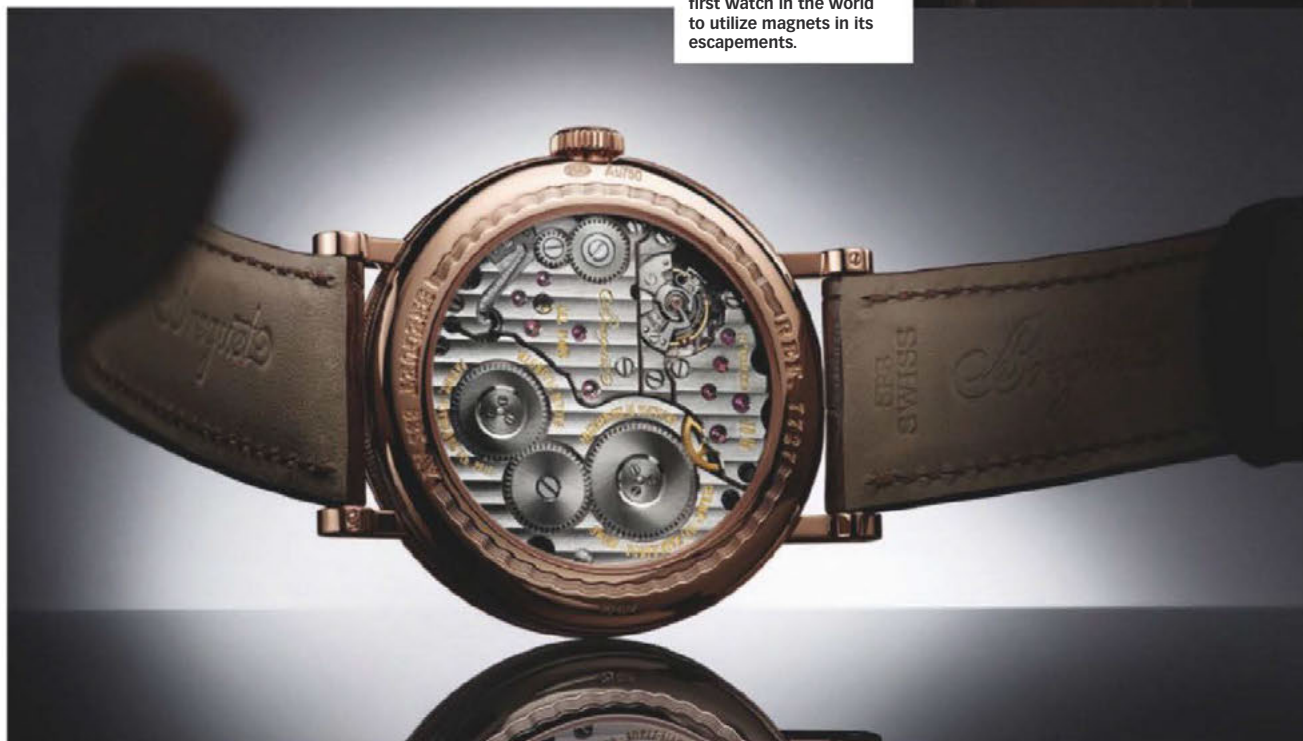
To this end, an increasing number of watch manufacturers have begun incorporating silicon into their movements. For example, Omega's new Master Co-Axial movements, which was launched last year, is made using a silicon hairspring along with other non-ferrous metals and is almost completely impervious to magnetic fields.

Last year, Vaucher Manufacture Fleurier, a movement manufacturer partly owned by famous French label Hermes, along with the Centre Suisse d'Electronique et Microtechnique (CSEM) announced a completely new type of escapement called the Genequand escapement. To understand the gravity of this, one must know that completely new escapement designs are very rare and the level escapement, which is used in virtually every watch today, was actually invented over two and a half centuries ago.

The Genequand escapement purports to offer improved accuracy and longer power reserve - up to 30 days using a traditional



The Breguet Classique Chronométrie 7727 is the first watch in the world to utilize magnets in its escapements.



mainspring. Comparatively, a traditional mainspring typically offers only two to three days of power reserve using the lever escapement. And this is possible because of silicon. Harnessing the flexible nature of silicon, the team at Vaucher and CSEM was able to develop an escapement that uses smaller movements to regulate the unwinding of the mainspring, thus extending the power reserve. And since silicon is frictionless and unaffected by wear, they were able to increase the frequency at which the escapement oscillates and thereby improving accuracy as well.

With its qualities, silicon might look as if it is the perfect material for watchmaking, but it is still vulnerable to gravity. The accuracy of mechanical watches are affected by their resting position, this was why in the late 18th century, famous watchmaker Abraham-Louis Breguet invented the tourbillon. The tourbillon is a rotating cage that houses the entire balance wheel and as it makes a revolution, the effects of gravity is averaged out.

Breguet, who is now under the stewardship of the Swatch Group, has developed a radical new system to combat gravity using magnets. Again, silicon use is right at the heart of this innovation. Using magnetic pivots to support the balance spring, Breguet was able to create a watch that can dynamically re-center and re-adjust itself after shocks. And because the balance is essentially suspended in a magnetic field, it is completely unaffected by the forces of gravity. As a result, Breguet is able to make the watch accurate to -1 to +3 seconds a day.

Admittedly, most of these breakthroughs that are currently incorporated into watches are undeniably costly. Omega's Master Co-Axial watches start from around US\$7,000 whereas the Breguet watch that uses magnetic pivots, the Classique Chronométrie 7727, costs a cool US\$60,000. However, such innovations are likely to trickle down to the respective brands' entry-level pieces, so expect prices to come down rather than go up.



Omega wants to outfit more of its watches with its new Master Co-Axial movements.





# THE SEASON OF TECH BREAKUPS

To ensure future survival, a painful split now is necessary for some companies.

by Ng Chong Seng

There's no doubt that 2014-15 is the season of tech breakups. No, I'm not referring to high profile executives leaving their companies to "try something new"; but rather, the splitting of companies from a whole to two or more entities.

The ability to better strategize and compete in the market is one of the most often cited advantages for pursuing a breakup. In layman's parlance, it usually means one division or business within a company is slowing the other down, so they're better off going their separate ways. Consider eBay Inc., which has decided to separate eBay, its e-commerce platform, from PayPal, its payments business by the second half of 2015. Such a move was untenable just a year back, simply because of the symbiotic relationship between the two, and the fact that PayPal has so much to gain from sticking with eBay (e.g., the convenience of eBay sellers and buyers being its customers too).

But times are a-changin'. With eBay transactions now forming just about a quarter of PayPal's business, PayPal's reliance on eBay is decreasing each passing day. In fact, PayPal is currently growing at a faster rate than eBay. And while this may sound like everything is still rosy, let's not forget this could change overnight, especially when you consider the increased competition in the payments industry (think Stripe, Square, Alipay, and yes, Apple Pay). Whichever way you slice it, the eBay-PayPal split looks justified.

Credit goes to the eBay's board for trying to do something before sh\*t happens.

But some breakups are harder to understand. I'm referring to HP, which aims to separate its corporate hardware and services business from its PCs and printers business by the end of fiscal 2015. Part of CEO Meg Whitman's five-year turnaround plan to bring the struggling computer maker back to relevancy, this spin-off is harder to comprehend from the outside because HP's enterprise division and PCs and printers divisions rarely overlap, which suggests this move is less about one group hindering the other. To me, it sounds more about enabling higher organic growth, which is easier for smaller companies, because they've fewer products to focus on, products that tend to under-perform when they're part of a huge portfolio.

It's about changing perceptions too. Think of it this way, instead of staying together and be viewed as a dinosaur (by both consumers and investors), perhaps it's wiser to re-group based on core competencies, and regain the startup mindset, so that each company can once again make a name for what it's best

at. The same reasoning may well apply to Symantec too, which in October 2014 announced that it'll be splitting into two: one to focus on security, and the other on information management.

Businesses always aim to grow. For some, a breakup is the best way forward. For others, it's mergers and acquisitions. But that's for another story.

"The ability to better strategize and compete in the market is one of the most often cited advantages for pursuing a breakup."

# AWS the Enabler

WEI ZHU  
CHIEF TECHNOLOGY OFFICER, MYTEKSI

by Azizul Rahman Ismail

## How much has MyTeksi grown in terms of user base, drivers and coverage since it was first launched in 2012?

We've grown tremendously. It's very different from a traditional company. I cannot give you the exact numbers but basically it has grown by leaps and bounds. We are talking about growth by orders of magnitudes. MyTeksi first started in Malaysia and since then, it has grown in six countries and now more than 20 cities, so the growth has been tremendous. On average, we are processing about six booking per second. That is an average for all countries for complete bookings. Of course, it is higher on peak hours, and we cannot always fulfill it.

## As a Malaysian startup, what were some of the challenges faced by MyTeksi in its first year?

For a company that is expanding as fast as we do, we face challenges from all sides. During peak hours, we do not have enough drivers to meet our customers' demand. We try and remedy this by introducing promotions to encourage drivers and recruiting more drivers. There are also times when the demand is high enough that we had bottlenecks. We definitely work with our partners at Amazon Web Services (AWS) to work on some of our bottleneck problems. I remember when I first joined MyTeksi, in the first week; we actually had multiple issues that require our immediate attention to meet the booking demand. One time, our server crashed and we contacted the AWS engineering team in Seattle to wake up in the middle of the night to help us.

## Was MyTeksi already using Amazon Web Services (AWS) from the get go?

Yes, we have used AWS since the beginning. The way I think about it is basically in today's age, for every tech startup using a cloud-based solution, AWS should be the default option. There are a number of competitors, yes. However, AWS is probably the pioneer in this space. They have been very aggressive in terms of their pricing and the services they provide. I think overall, there are a number of competitors that are pretty good out there, and I have nothing bad to say about them. It's just that AWS is something many people are familiar with and they provide excellent services. I certainly would not exclude anyone from looking at other providers.

## With more and more passengers relying on MyTeksi for transportation, what is MyTeksi doing to deliver successful taxi allocations with reduced booking cycles?

It's a very interesting challenge; one that we believe requires a combination of approaches to help improve the customer's experience. They are both technical and non-technical solutions or factors that help. On the non-technical side is how do we recruit more drivers and encourage them to take on more jobs. We do this with promotions and incentives. One of the projects we have initiated that prove to be helpful for everyone is called Drivers Providence Fund, a sort of insurance and retirement type funds for the drivers. One of our missions for MyTeksi is to help both passengers and drivers, we want to make a passenger's life easier by giving them rides that are faster, safer, and more reliable. Drivers too, they are some of the most hardworking people in our society. Often drivers gain 20% to 30% more income after using MyTeksi.

## Could MyTeksi handle the growing daily demands without relying on AWS services?

Well, anything is possible, but it would definitely be harder. AWS has a massive supply. By using it, we don't have to take much effort in advance capacity planning. It's just much easier for a startup that has unpredictable growth taking advantage of features such as Auto Scaling in AWS. It dynamically increases the number of servers that we used based on demand. Off-peak hours, the number of servers drops. As they charge based on demand, it made sense. If we don't have AWS, companies would have needed a massive number of hardware and have it hooked up, that's how we probably get started. Once it gets bigger, you would co-locate server by buying or leasing data centers at other locations.

## How secure and reliable has AWS been in MyTeksi's experience?

We have not had security breach due to AWS. We are constantly invested in security, which is one of the highest priorities for us. AWS takes a lot of burden from us as they are the one who monitors all the security threats, and many times, the security threat lies in the underlying operating system, for example, Heartbleed. AWS has the capacity to monitor and track automatic updates on various security issues and take a lot of burden from us. Often times, if and when a service goes down, it's because of configuration issues on our side. We never had AWS fail on us. There was only one instance during a worldwide security update, where all the servers needed a patch to prevent a security breach. During that time, we did experience a brief interruption. It was only minutes.





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to make a  
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easier by giving  
them rides  
that are faster,  
safer, and more  
reliable."



# Storage Insights

CRAIG DAVIS  
DIRECTOR OF SALES & MARKETING FOR BRANDED  
PRODUCTS IN APAC, WESTERN DIGITAL

by *Kenny Yeo*

**The new My Cloud EX systems seem to be all about making NAS user-friendly, how have consumers reacted to them?**

The My Cloud products are being extremely well received. And according to data from NPD for the U.S., we are number one now in NAS storage in the United States. The reason why it's been really well received is because we have made it easy to use. And if you make a product easy to use then people are going to adopt and use it. If it's too difficult then it's not going to be well liked. Our whole mantra inside the organization is to make, not just our NAS products, but to make everything we put out easy to use. And with the My Cloud series, you will see newer generation products coming down the track that are going to be even easier to use.

**You've mentioned that WD can really be thought of as a software company today. How is this so?**

Inside WD, we have a (dedicated) team of engineers and their focus is developing the software, improving the software and improving user experience. A lot of other organizations outsource that to different companies to do that sort of work for them, but we do it all in-house ourselves. It's pretty much like the Apple ecosystem to a certain degree. Apple keeps it all very enclosed and we are doing the same thing. In that way, we can control the user experience.

**Can you describe the market for personal cloud storage? Do you think it is still in its infancy?**

I think Gartner is coming out to say that in 2015, they expect to see the market to grow considerably. And I think it is really coming down to us as a manufacturer to start to educate the market a little bit about cloud. I think the market is starting to learn more about the cloud. We are hearing a lot about the public cloud being hacked. People are a little bit wary now about the cloud and what is the actual cloud. We are doing a bit of education around the personal cloud. We are saying, "Hey, this is a cloud of your own." And if you are look at some of the marketing materials we got, you are creating videos and stuff that are really highlighting the personal cloud message. It's your own cloud, safe and secure, rather than have all your information at a third-party location.

**With new innovations like 3D V-NAND, will flash ever overtake traditional hard drives in terms of capacity?**

No. In recent times we have seen flash move up a little bit, but when we move into new technologies such as HAMR (Heat-assisted Magnetic Recording) and so forth, and we will see that areal density of drives will go up. We already announced 10TB drives, when HAMR comes through that 10TB will turn into a 20TB. And two years later that turns into a 40TB.

We are creating so much content that there's not going to be one technology that is going to be dominant. The thing is both of these technologies will co-exist because they have different applications. There is no way you can put all the content we are creating on flash, and then the hard drive market falls away completely. There is no way we can put hard drives into mobile phones and tablets. So both technologies are going to co-exist. The way things are going, there is going to be plenty of space for both technologies.

**What's WD's strategy for flash then?**

Flash is an important part of our business. We have acquired a few flash companies over the last three or four years. And again, we will be incorporating flash and HDD technology into some of our products to get the best out of both worlds, which is performance and capacity. It depends on the application. It's something that we believe will co-exist and we are working to come up with products that will make sense in that space. It's very much about putting the two technologies together and making them co-exist. We see a lot of opportunities.



“

**If you make a product easy to use then people are going to adopt and use it. If it's too difficult then it's not going to be well liked.**

”



# JANICKI BIOENERGY OMNIPROCESSOR

by Salehuddin Husin

How would you like to drink clean water made from human waste? Yes, it sounds disgusting but what if there's no adverse impact and the water is as clean (even cleaner possibly) as tap water? Now, this isn't a new concept. Our neighbor Singapore has its own NEWater treatment process for a similar purpose, with the first plant operational since year 2000. However, the NEWater process firstly requires already treated used water as its source, not raw sewage sludge.

That's what the Janicki OmniProcessor claims to be able to do – up to 14 tons of waste a day to be exact. The OmniProcessor combines an incinerator, water filtration system and steam power plant. It's almost self-sufficient as each component feeds and powers the other, so the process itself is eco-friendly. Besides treating sewage into drinkable water, it

serves a secondary purpose of also generating electricity.

With financial backing from the Gates Foundation, it could potentially save countless lives in developing countries or locations where clean water is hard to access. A single plant is supposedly capable of treating water for up to 100,000 people. Also, resource-strapped countries could usher in a self-reliant era, and potentially generate a source of income selling excess energy created from waste recycling.

The OmniProcessor has already been deployed to Dakar, Senegal to test its capabilities in the real world. If everything goes well, Janicki Industries already has plans for a wider rollout in Africa soon. The machine will not only usher in a new age of waste reclamation, it could also help save millions of lives in areas where clean water is scarce or impossible to find.





# A TV THAT CARES

Sharp COCORO Eye Brings a Unique  
Net TV Experience



When talking about Net TVs, we usually think of an Internet-connected entertainment appliance that serves streaming media, some local and some online. These TVs also serve up apps bearing information and services, such as local news and recipes. But Sharp brings a fresh new perspective to the term Net TV with the **COCORO Eye**.

## Display with a Heart

'Cocoro' means heart in Japanese and that is exactly what is at the center of the Sharp COCORO Eye. Sharp developed COCORO Eye with the concept of an appliance that cares. For one, it is capable of everything you would expect from an Internet-connected TV, such as connectivity and apps. Furthermore, it also has a few advanced features such as smart-power control, assist-light mode, and auto color adjustment.

The secret is the COCORO Eye, a sensor mounted at the bottom of the TV. Borrowing a trait often found in smartphones and tablets, the TV's auto color adjustment uses the sensor to

detect and measure ambient light of the room it is in, and automatically adjusts the screen brightness accordingly. Taking it a step further, the COCORO Eye also adjusts its color settings to give users the best viewing experience.

## Lighting Your Way

With your electricity bill in mind, smart-power control ensures that you are not wasting electricity. Using the COCORO Eye, it scans for movement, checking if there is indeed someone watching the TV. If it detects that no one is watching, it will turn off the display while leaving the volume as is. The display turns back on immediately once it detects movement again.

The TV is usually located in the center of a home. Imagine waking up in the middle of the night and feeling thirsty, but the fridge is on the other side of the living room. Half awake, you make your way by memory to the kitchen in pitch darkness with no idea what is right in front of you. Detecting your movement, the COCORO Eye activates its assist-light mode and effectively turns its screen into a lamp that is gentle enough not to strain your eyes, but bright enough for you to see and avoid any obstacles.

A TV that cares, there is nothing quite like it out there. And with the COCORO Eye, Sharp truly brings a new angle to the term Net TV.

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FEATURE

# HOW XIAOMI ROLLS

■ An awful lot of people like to compare Xiaomi to Apple, and its founder and CEO Lei Jun to the late Steve Jobs. Sure, there are parallels to be drawn, from the Apple-like design of certain Xiaomi products, Lei's track record in other industries, and his minimalist presentation slides at launch events - but you'd be a fool to think that these are enough to propel the young upstart to one of the leading smartphone vendors in China and its latest US\$46 billion valuation. In fact, the two aforementioned examples are just consumer-facing manifestations of Xiaomi's strategy, and they offer no explanations on what really contributes to its runaway success.

Text by *Ng Chong Seng*





# FOR THE USERS, WITH THE USERS

Steve Jobs once said: "A lot of times, people don't know what they want until you show it to them." That might be true many years back, but is increasingly less so in this Internet and social media age. From the days of MIUI being just an Android-based firmware to the current Mi Note flagship phablet, Xiaomi has always solicited feedback from its users and figuring them in product design and features.

According to Hugo Barra, one of Xiaomi's eight vice presidents and the one leading the company's international expansion, the barely-5-year-old company receives one million pieces of user feedback per day, covering all aspects of Xiaomi's products and services, from phones to UI to cloud offerings. And if a feasible suggestion or a critical bug came to the attention of its product managers (who spend an inordinate amount of time gathering said feedback), the engineering team would be all over it in a matter of hours. This constant finger on the consumers' pulse is what allows Xiaomi to do something that we don't usually see from other phone makers: weekly hardware and software updates.

Of course, it's not as if other device makers don't have a feedback channel. But Xiaomi goes out of the way to make its users feel involved and appreciated. Take a look at the MIUI forums, and you'll notice old-timers, moderators, and Xiaomi insiders actively answering questions from new users. Fire up any of its localized Facebook pages (or its Chinese Weibo page), and you'll see constant fan engagement, be it responding to queries or creating awareness for an upcoming product or sale. Go to a Mi fans gathering, and you'll find out that many volunteered to help out without expecting any returns, except for maybe a T-shirt at the end of the day. I once asked a Mi fan why he is so passionate about the company,

*"Take a look at the MIUI forums, and you'll notice old-timers, moderators, and Xiaomi insiders actively answering questions from new users."*

and he said: "Because Xiaomi is all about us." Xiaomi has a Chinese marketing slogan "为发烧而生", which can be loosely taken to mean that the company is born to create exciting products for its users. Brilliant marketing or wise mission statement? You decide.

Here's another anecdote. When I was in Beijing recently for the Mi Note announcement, I noticed that seats at the front and center were not reserved for the media. Instead, they were for - you guessed it - the Mi fans. It's a great PR move (P as in public, not press), because frankly speaking, making the press happy doesn't build brand loyalty or move sales. Making the users happy, on the other hand, does. If you're looking for a case study that shows a successful blend of naturally occurring word-of-mouth and company-driven word-of-mouth marketing, this is it.

## NOT JUST A LOW PRICE STRATEGY

Xiaomi's retail strategy, or rather, online-only strategy also pays off big time. For those unaware, there's no way to buy a Xiaomi phone in a brick and mortar store; the only official way to land one is through its e-commerce store. Sure, there are Mi Homes (Xiaomi's own physical retail stores) and telco partners, but the former don't sell phones (only accessories and Wi-Fi-only Mi Pad tablets) and the latter require you to sign a contract.

The primary reason is because Xiaomi's sales model isn't all about volume; it's partly a learning model too. By keeping inventory low and selling products in batches (weekly flash sales are common for Xiaomi), it's able to more accurately predict future demand,

as well as make constant hardware tweaks based on feedback. For a small company, it makes tremendous sense from an after sales and support standpoint too. Say, in the event that a faulty component needs to be swapped out, it's easier for service centers to handle 10,000 requests than 1,000,000 requests at the same time.

Of course, many have accused that limiting supply is just Xiaomi's way to generate demand. But limiting supply won't increase demand if a product isn't desirable in the first place. It's easy to point to the company's sell-at-near-cost strategy, which enables (forces?) it to consistently price its devices below comparable ones from competitors, as the reason for the demand; but this is an easily copied modus operandi, as recent offerings







from ASUS, Huawei, Lenovo, and ZTE will tell you. The brilliance of Xiaomi is its ability to weave the premium design and quality user experience story across its entire portfolio, even for its budget smartphones and accessories like power banks. Consider this: for mainstream users, Xiaomi's Redmi phones are seen as "low-cost smartphones with good design and UX"; for enthusiasts, the Mi phones are "nicely designed, high-spec'd smartphones that are affordably priced". Notice the profound differences in the similarities of these two statements?

Now, one would argue that this willingness to accept low profit margins on hardware isn't sustainable in the long run. Surely, as Xiaomi sells more and more smartphones globally, it has to make up for the profits somewhere? Its e-commerce business is doing very well in Greater China, but can that be replicated in other territories, like India and Latin America? The Mi Note, Xiaomi's most expensive smartphone to date, can be seen as an attempt to increase the average selling price of its phones, but it's too early to say that it's going to be a trend. Even if that's Xiaomi's intention, I'll posit that at least in the next few years, it'd only happen to high-end models, which are typically snapped up by the more affluent, and margins can be higher. Case in point: the next budget Redmi 2 is expected to cost about the same as the Redmi 1S, which makes sense when you consider the international markets Xiaomi is entering, as well as the competition it's up against there (e.g., the other Chinese players, Micromax in India).

#### FOCUSES ON FEW PRODUCTS

Which brings me to the point on what does Xiaomi actually make. Beyond smartphones, tablets, and their related, small ticket accessories like replacement batteries, cases, and screen protectors, the third largest e-commerce platform in China also sells a boatload of other stuff, from toy rabbit mascots, power banks, headphones, Bluetooth speakers, and fitness trackers to set-top boxes, wireless routers, IP cameras, air purifiers, and 4K TVs, with many of them sporting a Mi badge.

**"The brilliance of Xiaomi is its ability to weave the premium design and quality user experience story across its entire portfolio."**

If you think that Xiaomi is crazy to make so many products, don't. As revealed by Lei Jun, the company has always focused on just three products: phone, router, and TV. The phone is obvious, as that's the product it started off with, and it fits right into Xiaomi's current strategy of it being the main device for controlling other smart devices in the home. With the increasing popularity of 4K and over-the-top services, the TV part is understandable too. What about the router? Well, you do need something to link all your devices together, get them onto the network, and connect them to the cloud, don't you?

For the other products, they're actually made by the 20+ companies that Xiaomi has invested in or collaborated with. For example, the Xiaoyi IP camera comes from Shanghai Xiaoyi Tech; the Mi Power Banks from JiangSu Zimi (or ZMI); the Mi In-ear Headphones from 1More Design; the Mi Band from Huami Tech; and the Mi Air Purifier from Zhimi Tech. To strengthen the software and services aspects of its ecosystem, Xiaomi is also an investor of Xunlei (for video content and storage acceleration applications); Westhouse (a game developer owned by Kingsoft); Youku (China's biggest online video site); and iQiyi (a super-popular online video portal in China).

There's no question that this strategy of investing in third-party companies (many of which are startups) and selling their products on Xiaomi's e-commerce platform has worked out very well for all parties. For Xiaomi, it's able to build up its ecosystem without taking on all the risks; for its partners, they're associating their products with the hottest tech brand in China at the moment.

Moving forward, the home continues to be the next frontier for Xiaomi, as its recent investment in Midea (a Chinese electrical appliance maker that makes refrigerators, washing machines, and ovens) and the development of a "smart module" that aims to turn any device into a smart device clearly signal. What's different now compared to a few years back is that Xiaomi should have an easier time persuading third parties to join its ecosystem. After all, this is a brand that has sold 61 million smartphones in 2014, and is gunning for 100 million in 2015. **HMM**

# EVERYDAY SUPERHEROES

by Salehuddin Husin

Who says life must be mundane when you've got technology on your hands? You don't even have to be a genius, billionaire, playboy philanthropist too. Ok, sure, you might blow a paycheck or two, but with these gadgets, you'll be the darling of the new world. Yes, geeks are sexy now.



**ZUTALABS POCKET PRINTER**  
WWW.ZUTALABS.COM

You've heard of robot vacuum cleaners, but how about a robot printer? The Pocket Printer is under 11cm in diameter and weighs a measly 350g. It can print from just about any device (via Bluetooth) and on any standard sized paper. Just place it on the paper and watch the little guy print away. Batteries last for an hour on a single charge and prints about 1.2 pages per minute (A4 size). It's not speedy, but if anything, it certainly will make the mundane task of printing documents look cooler than it every has been.



**LENOVO THINKPAD STACK**  
WWW.LENOVO.COM

The ThinkPad Stack isn't a single item, it's a line of different items that you can get piecemeal and then stack them into an unholy tower of power. Think of it as your own little tech utility belt. The ThinkPad Stack has various components: a portable HDD, a power bank, wireless access point and speakers. Instead of having various gadgets all jangling around in your bag, the Stack allows you to mix and match to get your favorite combo and combine them for convenience.



**LEATHERMAN TREAD**  
WWW.LEATHERMAN.COM

Speaking of utility belts. How about an actual utility tool that even a certain caped crusader would be jealous of? It's rugged, stylish and incredibly functional. In fact, the Tread is really an ingenious design that incorporates 25-tools such as Allen keys, screwdrivers, box wrenches and even bottle opener all into one bracelet. Each link in the bracelet carries multiple tools, is made from 17-4 stainless steel and is fully customizable with both tools that you need the most and size to fit just about any wrist.



ILLUSTRATION WWW.FREEPIK.COM





**PACIF-I SMART PACIFIER**  
[BLUEMAESTRO.COM](http://BLUEMAESTRO.COM)

There's no typo. There is such a thing as a smart pacifier. We know that some of you guys are raising the next generation of geeks and as fellow geeks, have taken it upon ourselves to ensure that you have the best tech to use. This Bluetooth pacifier doubles as a thermometer and tracking device to make sure your little one doesn't stray too far from your watchful eyes. There's also an alarm that you can trigger if it's missing. Basically it's something we'd all have wanted if we were babies today.



**WOCKET SMART WALLET**  
[WWW.WOCKETWALLET.COM](http://WWW.WOCKETWALLET.COM)

Wocket might sound a little silly at first, but the product they are peddling is anything but. The Smart Wallet is a gadget the size of a wallet with a screen. You input your card details (any card, from MasterCard to VISA) and it'll save them in its memory. When you want to use a certain saved card, you select the card from the menu and it'll securely flash that card's detail into its custom card, which you can then use. Like we said, sounds silly, but we want one.



**FUEL3D SCANIFY**  
[WWW.FUEL-3D.COM](http://WWW.FUEL-3D.COM)

With 3D printing technology on the cusp of becoming mainstream, what better way to get ready for that trend than with a 3D scanner? You use the scanner like you would any camera, just point it at whatever object and shoot. You can then export to a 3D design program (like Maya) and print! You don't know how to use Maya? Lucky for you, we knew that was going to be an issue so we've done some quick Maya tutorials in this issue of HWM. Of course, you will still need a 3D printer.

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TEST

# LAB RESULTS

Every month behind the doors of our super secret gadget testing facility, the latest tech products are put through their paces using industry-recognized benchmarks and our own blend of real-world usage scenarios. Here are our findings.

## HOW WE RATE:

Products are rated on a scale of **1** to **10**, **1** being so abysmal, it should be a crime to sell it, and **10** being almost perfect. Come now, nothing is perfect. An Editor's Choice may also be awarded based on unique merits.

## MORE INSIDE >

CASIO G'MIX GBA-400  
G-Shock by day, music maestro by night.

ELYSIUM PORTO VII  
Full metal audio.

BENQ W1080ST  
Full HD projection.

SHARP COCORO EYE  
One eye on all.

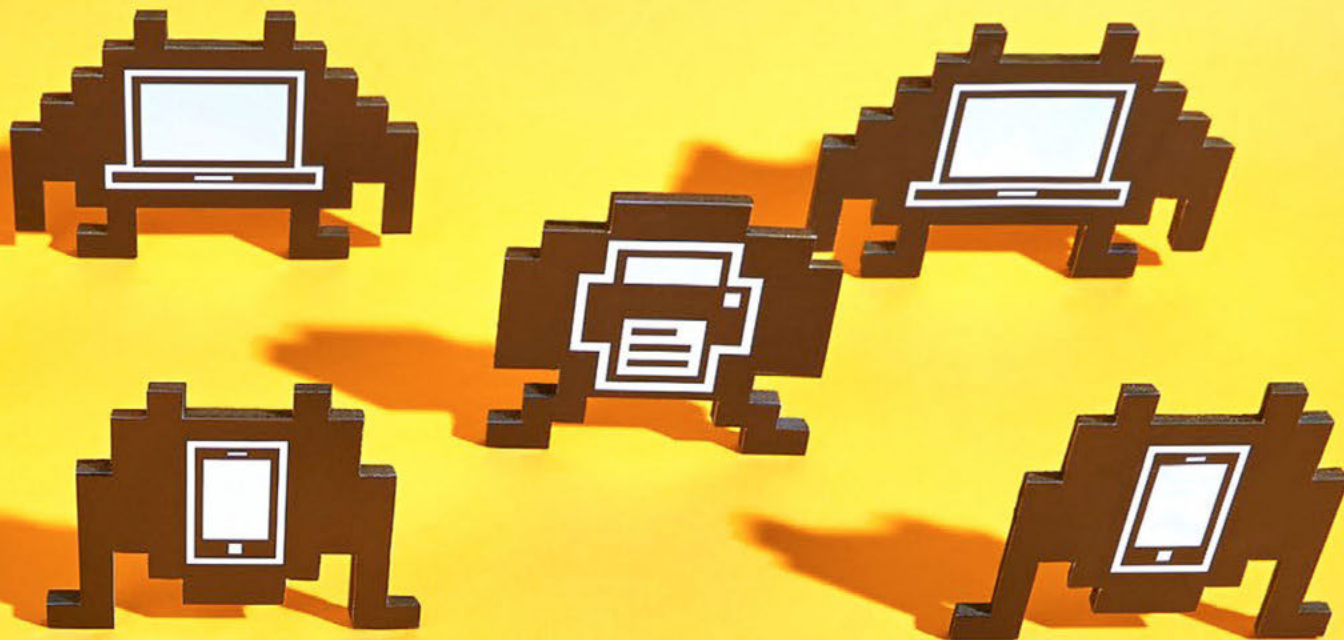


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# SPEED DEMONS IN THE AIR

If speed is what you crave, then the new wave of AC-2400 wireless routers are currently the fastest available in the market. Before you setup your new network or upgrade your existing one, here are three of the latest to consider.

Text by *Kenny Yeo*

Photography by *Vernon Wong + Vee Chin*

Art Direction by *Ian Chong*

**VS**  
ASUS RT-AC87U  
•  
LINKSYS E8350  
•  
NETGEAR NIGHTHAWK X4

## ASUS RT-AC87U

The ASUS RT-AC87U is the company's first product that is part of the new 802.11ac Wave 2 class of networking products. It supports up to four spatial streams, meaning a data transfer rates of up to 1,733Mbps is possible on the 5GHz band, and also supports MU-MIMO (Multi User Multiple-Input and Multiple-Output).

Under the proverbial hood, the ASUS RT-AC87U is powered by a 1GHz dual-core Broadcom BCM4709A SoC. The 5GHz radio is powered by the Quantenna QSR1000 chipset, whereas the 2.4GHz radio is powered by the Broadcom BCM4360.

Its sharp angles and aggressive design make it unmistakably an ASUS router. It looks cool, but is also very wide. This means it can only be positioned in a horizontal position. Coupled with four humongous antennas, positioning this router can be tricky. A row of LED indicators up front allows users to check the status of the router.

Behind the router lies the usual assortment of Gigabit ports - four LAN and a single WAN. There is also a USB 2.0 port, a WPS setup button, reset and power buttons. The USB 3.0 port is positioned in front, hidden behind a rubber dust cover. Although easily accessed, it also means that connecting an external storage device will break up the router's facade. Hidden in the front left of the router are

also two buttons that can instantly turn of the router's LED indicators and Wi-Fi.

The ASUS RT-AC87U uses ASUS' familiar ASUSWRT setup interface, which has been consistently upgraded over the years. It is fairly easy to navigate and straightforward to use. As you would expect from a high-end router, the usual assortment of options such as Parental Control, advanced Wi-Fi management, real-time traffic monitoring are all here. The RT-AC87U also gets AiCloud 2.0, an updated cloud storage manager that allows users to access external storage devices from anywhere using an accompanying app.

The latest version of ASUSWRT also includes a number of new enhancements such as Ai Protection, a built-in anti-spyware and anti-malware utility that active scans incoming packets of data; and Adaptive QoS, which uses advanced algorithms to adjust

traffic based on current user demands and loads.

The ASUS RT-AC87U is a strong performer, especially on the 5GHz band. Uplink and downlink on the 5GHz is very strong and consistent across all tested ranges - above 100Mbps even at 17m. 2.4GHz performance was not shabby either, but uplink speeds dipped quite drastically at our farthest test range of 17m.

**+**  
**Strong performance across both frequency bands and all tested ranges.**

**-**  
**Big and bulky. Odd placement of USB 3.0 port.**



### AT A GLANCE

#### Wireless

802.11 a/b/g/n/ac

#### Frequency bands

2.4GHz and 5GHz

#### Ports

1x USB 3.0  
1x USB 2.0

#### Price

RM1,199



The USB 3.0 port is concealed by a rubber dust cover.



LED status indicators on the front panel makes it easy to troubleshoot should anything go wrong.



Behind the router is a USB 2.0 port, the usual assortment of a single Gigabit WAN port and four Gigabit LAN ports, reset button and WPS button.



## LINKSYS E8350

As one of the most storied names in networking, Linksys was acquired by Belkin in the early part of 2013. Under new leadership, they've showed that they're seriously about high-end consumer networking and only fitting as one of the first few brands to release an AC-2400 class router - the Linksys E8350.

Inside, the Linksys E8350 is powered by a dual-core Qualcomm IPQ8064 processor that runs at 1.4GHz. The 5GHz radio is powered by Quantenna's QSR1000 chipset, whereas the 2.4GHz radio is powered by Qualcomm's QCA9880 chipset. This allows the Linksys E8350 to support up to 1,733Mbps on its 5GHz band and 600Mbps on its 2.4GHz band.

In terms of design, the Linksys E8350 is arguably the most restrained. It does have four pretty large antennas, but they are considerably smaller than the ones found on the ASUS and Netgear routers. Additionally, the E8350 is actually relatively small in size for a high-end router. It probably wouldn't even look out of place if it was wall-mounted. While we like the E8350's compact dimensions, we were disappointed to find that it has no LED indicators, making it harder to troubleshoot errors.

Unlike the ASUS and Netgear routers, all the ports can be found on the back of the E8350. Apart from the usual single Gigabit WAN port and four

Gigabit LAN ports, the E8350 also offers a single **USB 3.0 port and another USB 2.0/eSATA combo port**. The Gigabit ports have LED indicators and that is the only way to know if the router is functioning properly. To the extreme right, users can also find buttons for WPS setup, and power and reset buttons.

Strangely, despite the high specifications of the router, the Linksys E8350 does not fall into the company's lineup of Smart Wi-Fi routers. As a result, it is missing many important and useful functions such as cloud storage functionality, dynamic QoS, real-time traffic monitoring and so forth. On the flip side, navigation is straightforward and users should have no trouble setting up the router, and it does have other commonly used features such as port forwarding, DMZ and media server functionality, which should serve the needs of more basic and less fussy users well.

Overall, the Linksys E8350 performance was a little disappointing. Although its speeds on the 5GHz band were decent, it trailed both the ASUS and Netgear routers by a considerable margin, especially at close and extreme ranges. Performance on the 2.4GHz band was really poor as the E8350 recorded speeds that were less than half that of its competitors. And at 17m, it could not even complete our file transfer test.



**Compact design.  
Competitive  
performance on  
5GHz band.**



**Lack of features.  
Poor 2.4GHz  
performance.**

### AT A GLANCE

#### Wireless

802.11 a/b/g/n/ac

#### Frequency bands

2.4GHz and 5GHz

#### Ports

1x USB 3.0

1x USB 2.0/eSATA

#### Price

RM1,099



On the rear, users can find a USB 3.0 port and a USB 2.0 and eSATA combo port.



Behind are also buttons to disable Wi-Fi and another for WPS setups.



The top panel is perforated to help with cooling.



## NETGEAR NIGHTHAWK X4

The Nighthawk X4 is Netgear's first 802.11ac Wave 2 flagship router. Since it is still the early days for AC-2400 routers, the Nighthawk X4 uses a lot of the same components as its competitors in this class. Powering the router is a 1.4GHz dual-core Qualcomm IPQ8064 processor, whereas 5GHz duties are handled by the Quantenna QSR1000 chipset, and 2.4GHz duties are managed by the Qualcomm QCA9880 chipset. So like the other routers in this shootout, the Nighthawk X4 is capable of a maximum data transfer rate of 1,733Mbps on its 5GHz band and 600Mbps on its 2.4GHz band.

As for design, the Nighthawk X4 looks very much like the old R7000 which it succeeds. It is highly angular and retains a trapezoidal shape. A row of LED indicators also lets users quickly check the status of the router or if anything has gone wrong. Coupled with its four huge 16cm long antennas, the Nighthawk X4 looks very modern. It is also massive though, and can only be positioned horizontally on a surface. Wall-mounting is possible, but with a weight of around 750g, best be sure you have something strong enough to hold it to the wall.

Round the back of the router, users can find a single Gigabit WAN port and four Gigabit LAN ports, a switch to turn off the LED indicators, and the power and reset buttons. The Nighthawk X4 also

has two USB 3.0 ports and a single eSATA port for connecting external storage devices and printers, and these are located at the two sides of the router. The positioning of these ports is both good and bad. They are definitely easier to access, but having cables dangling from the sides kind of breaks its aesthetics.

For less tech-savvy users, the Nighthawk X4 comes pre-configured with a sticker indicating its SSID and also its password. So if you are not a fussy user, you could use it straight out of the box. Otherwise, users can use the Genie interface to further tweak and configure the Nighthawk X4. It has all the features and options you would expect from a high-end router, including advanced wireless settings, VPN support, real-time traffic monitoring and also Dynamic QoS, Netgear's take on an adaptive QoS system that can adjust itself on the fly to allocate bandwidth accordingly to devices based on their usage and needs.

As for performance, the Nighthawk X4 impressed us with highest downlink speeds in our tests over both the 2.4GHz and 5GHz bands. Unfortunately, uplink performance was not quite as good. On both 2.4GHz and 5GHz bands, we noticed that its uplink performance suffered quite significantly from 13 meters onwards - though this was to a lesser extent on the 5GHz band.



**Fast and consistent downlink performance. Two USB 3.0 ports.**



**Bulky design. Slightly lackluster uplink performance.**



### AT A GLANCE

#### Wireless

802.11 a/b/g/n/ac

#### Frequency bands

2.4GHz and 5GHz

#### Ports

2x USB 3.0  
1x eSATA

#### Price

TBA



To the left of the router are two USB 3.0 ports.



And to the right is a single eSATA port.



If you find the LED indicators annoying, a switch at the back of the router lets you turn it off.





MODEL	ASUS RT-AC87U	LINKSYS E8350	NETGEAR NIGHTHAWK X4
NETWORKING STANDARDS	802.11 a/b/g/n/ac	802.11 a/b/g/n/ac	802.11 a/b/g/n/ac
FREQUENCY RANGE	2.4GHz & 5GHz	2.4GHz & 5GHz	2.4GHz & 5GHz
ANTENNA	4 external antennas	4 external antennas	4 external antennas
CPU	1GHz Broadcom BCM4709A	1.4GHz Qualcomm IPQ8064	1.4GHz Qualcomm IPQ8064
SECURITY	64-bit WEP, 128-bit WEP, WPA2-PSK, WPA-PSK, WPA-Enterprise, WPA2-Enterprise, WPS support	WEP, WPA/WPA2 Mixed mode, WPA2/WPA Personal, WPS support	WPA2-PSK, WPA/WPA2, WPS support
PORTS	1x Gigabit WAN 4x Gigabit LAN 1x USB 3.0 1x USB 2.0	1x Gigabit WAN 4x Gigabit LAN 1x USB 3.0 1x USB 2.0/eSATA	1x Gigabit WAN 4x Gigabit LAN 2x USB 3.0 1x eSATA
DIMENSIONS	28.9 x 16.7 x 4.7 cm	25.9 x 18.3 x 5.6 cm	28.5 x 18.5 x 11.2 cm
WEIGHT	747g	635g	750g
PRICE	RM1,199	RM1,099	TBA

## COMPATIBILITY WOES

Although AC-2400 class routers are currently the fastest routers available, take note that they require clients with compatible 802.11ac Wave 2 chipsets to be able to fully maximize their potential. And unfortunately, at the time of writing, there are no such devices in the market yet. The current work around to this is to get two routers and have the other one operate as a bridge and connect your devices via Ethernet. It's costly and impractical for sure, but that is the only way for the time being. Alternatively, one can wait for compatible adapters such as the ASUS EA-AC87 or future USB wireless adapters to be released.



## AND THE BEST AC2400 ROUTER IS



### ASUS RT-AC87U

Of the three routers tested, the ASUS RT-AC87U is the clear leader in terms of performance. Although it may be bested by the Netgear Nighthawk X4 in some instances, the ASUS was consistently stronger on both 2.4GHz and 5GHz bands. Performance aside, it is also chock-full of useful features. For example, AiCloud 2.0 is an easy way to make your own personal cloud with any connected external storage device, Ai Protection provides additional protection against spyware and malware and real-time traffic monitoring lets you manage your networks like a pro. And yet, the ASUS RT-AC87U is easy to setup; a single-click is all it takes to enable its Adaptive QoS feature. plus the user interface is straightforward and easy to navigate. At RM1,199, the RT-AC87U is certainly the best package all around. The Linksys E8350 is similarly priced, but is quite stingy with features while you pay a premium for added functionality with the Netgear Nighthawk X4.

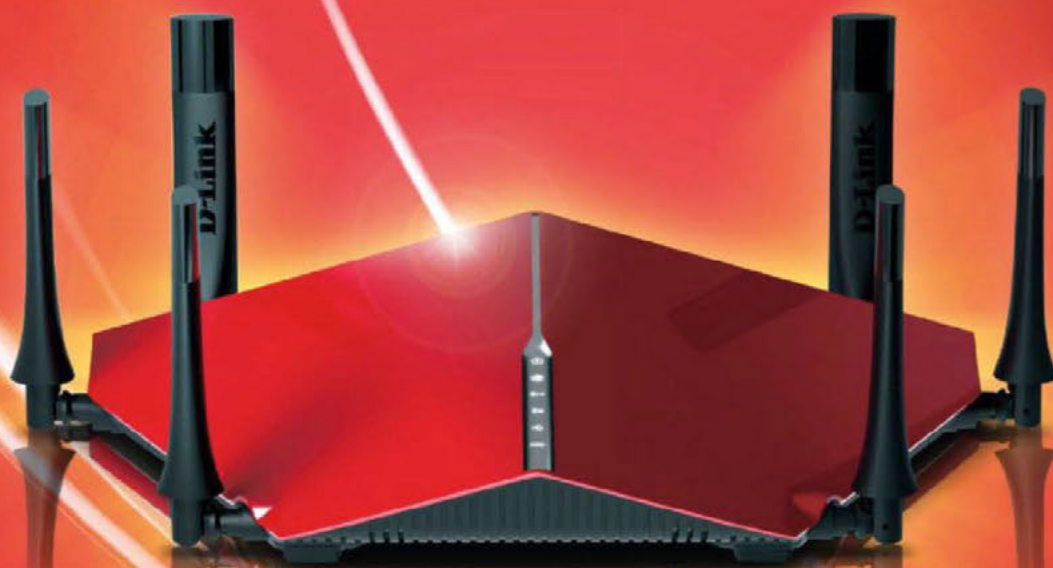


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# GOING WITH INK

The laser printer may still be king of volume in a large office, but inkjet printers are slowly taking over the home and small offices due to constantly improving print speeds, accurate color reproduction and lower ink costs. We look at three of the latest models to determine which is the best bet for your small office/home office.

Text by *Hafeez Sim*

Photography by *Jasper Yu*

Art Direction by *Ian Chong*



*Page 3 of Printer Test Document (Test)*

In making my selection I have chiefly tried to make the present clear, to make it as easy as possible for the reader to find the very best thing, and I have therefore avoided as far as possible the more familiar "formula" of the old literature.

She was the creature of fairest form, of loveliest aspect, and of gentlest nature that existed between earth and heaven in all Ireland—whatever colour of hue she had before, there was nobody that looked into her face but she would blush fiery red over it.

"Well, Connachar, we will not accept that offer from you, nor thank you for it. Greater by far do we prefer to go home to our father and tell the deeds of us, though you are so keen to shed their blood, and you would shed our blood also, Connachar."

He came to the cow, "What news to-day?" said the cow, "It's my milk, I'm seeking. Going looking for a cow, cow to give me milk, milk."





EPSON



vs  
BROTHER MFC-J2720  
•  
EPSON L555  
•  
HP OFFICEJET PRO 8620

## BROTHER MFC-J2720

The MFC-J2720 is Brother's flagship inkjet printer for 2014, and it comes with features that make it suitable for your small office. Scanning and fax is a given, though the MFC-J2720 also comes with duplex printing, so you won't need to manually flip the pages over when printing double-sided documents. A 50-sheet automatic document feeder (ADF) lets you print, copy and scan without having to attend to the printer. Unlike the other two printers in this shootout, the J2720 is able to handle A3 paper, so you can print photographs and spreadsheets that include more detail. Paper handling is also impressive, as it can handle 500 sheets of paper at a go with its dual paper trays. This puts it quite a bit ahead of the other two in terms of paper handling and also flexibility, as the two trays make it easy to switch between printing different paper sizes.

**+**  
**A3 printing. Large paper handling. User friendly touchscreen.**

**-**  
**Average print speed.**

And don't forget the multi-purpose tray, which handles up to 80 A4 sheets or five A3 sheets of paper, bumping up the paper handling quantity even further. You can skip using your computer to print as the MFC-J2720 lets you print JPEG files and compatible documents directly from USB flash drive, media cards or a PictBridge compatible camera. With built-in Wi-Fi, you can print directly from your iPhone, iPod touch or iPad with the free Brother iPrint & Scan app. With the app, you can also bypass your computer and scan directly to your iOS devices. The MFC-J2720 has a 3.7-inch touchscreen control panel, and it's easy to use as well. You

can also view the current ink levels, and the option to align the print heads is easy to find as well.



### AT A GLANCE

**Print resolution**  
1,200 x 6,000 dpi

**Scan resolution**  
2,400 x 2,400 dpi

**Automatic duplex**  
Yes

**Paper Handling**  
250 sheets (Standard Tray), 250 sheets (lower tray), 80 sheets (Multi-purpose tray)

**Dimensions**  
490 x 345 x 308mm

**Price**  
TBA



The Brother MFC J2720 comes with two paper trays, and can store up to 500 sheets of paper.



It also has a 3.7-inch touchscreen display.



The MFC J2720 can handle A3 paper.



## EPSON L555

The Epson L555 has the smallest footprint among the printers tested here, so you will have no problems using this printer in a smaller office set-up. But even then, the L555 manages to squeeze in a 30-sheet automatic document feeder so you can print, copy or fax multi-page documents without having to manually feed each sheet. Paper handling is modest, as the Epson L555 comes with a single paper tray that can handle 100 sheets at a go. Inkjet ink cartridges aren't known to be expensive, and costs can go up quickly if you're doing a lot of printing. But the Epson L555 uses the ink tank system, so you can save a bit even if you're doing a fair bit of printing as the ink refill bottles cost US\$5.50. Unfortunately, the Epson L555 is the only one

in this lineup that does not have automatic duplex printing, so you will have to manually flip the pages over when printing double-sided documents.



**Compact.**  
**Affordable ink tank.**  
**Cloud support.**



**No duplex support.**  
**Small paper capacity.**

In terms of wireless printing and scanning, the Epson L555 seems to be quite competent. With built-in Wi-Fi and the help of the free Epson iPrint app, you can print webpages, documents and PDF files directly from both your iOS and Android devices. You can also scan and save directly to your iOS and Android devices, in addition to being able to upload the scanned files or documents to cloud services such as Box, net, Dropbox, Evernote or Google Drive. The L555 does not have a touchscreen display, and comes with a conventional control panel and a two-line monochrome display.

### AT A GLANCE

**Print resolution**  
1,440 x 5,760 dpi

**Scan resolution**  
1,200 x 2,400 dpi

**Automatic duplex**  
No

**Paper Handling**  
100 sheets

**Dimensions**  
474 x 377 x 226mm

**Price**  
RM928



The Epson L555 sports a conventional control panel.



It uses the ink tank system, which lets you refill the tanks yourself.



It has a 30-sheet ADF.



## HP OFFICEJET PRO 8620

In terms of size, the Officejet Pro 8620 is the largest here, so it might be a bit difficult for those with limited real estate in their offices. The Officejet Pro 8620 is in the middle of the pack when it comes to paper handling, with a 250-sheet input tray as well as a 50-sheet automatic document feeder. It also comes with a print duplexer, so there's no need to flip the pages yourself when printing double-sided documents. You can also scan documents to and print from a USB flash drive. You can connect the HP Officejet Pro 8620 to your office network through Wi-Fi or Ethernet, and print directly from your iOS or Android smartphone or tablet. And even if there's no network in your office, you can still print from your smartphone or tablet as

the printer has Wireless Direct, which is HP's own form of Wi-Fi Direct.

**+**  
**Comprehensive network support. Wireless Direct. NFC.**

**—**  
**Bulky. Scanning can be a hassle.**

One thing unique about the Officejet Pro 8620 is that it comes with near-field communication (NFC), so in theory you can just tap an NFC-enabled smartphone to print a document or file. The Officejet Pro 8620 opts for a 4.3-inch touchscreen control panel, making it the largest among the three printers tested. It's generally easy to navigate the printer's interface, though for scanning you will have to use the desktop software to do so. While this approach offers you more control over your scanned files, it does delay the scanning process

if you want to scan something without adjusting any settings.



### AT A GLANCE

**Print resolution**  
1,200 x 4,800 dpi

**Scan resolution**  
1,200 x 1,200 dpi

**Automatic duplex**  
Yes

**Paper Handling**  
250 sheets

**Dimensions**  
499.3 x 647.5 x 314mm

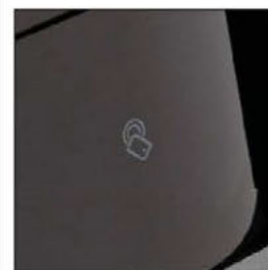
**Price**  
RM999



The Officejet Pro 8620 comes with a 4.3-inch touchscreen control panel.



The ADF can handle up to 50 sheets.



The Officejet Pro 8620 comes with NFC.



## PRINTER PERFORMANCE - BROTHER MFC-J2720

The Brother MFC-J2720 sits right in the middle when it comes to print speed. Print speed for black and white documents is 17.9 pages per minute, but it did manage to outperform the HP Officejet Pro 8620 when it comes to printing color documents, with a print speed of 15 pages per minute. It takes the Brother MFC-J2720 59.16 seconds to scan a 10-page color document job, and 18.99 seconds to scan an A4 full color photographic print.

The Brother MFC-J2720 has the best text print quality among the three. It's the sharpest so there are definitely no problems in using the printer to print business documents. Detail and color saturation is similar to the Epson L555, so there's slightly less detail and color saturation when compared to the HP Officejet Pro 8620. Photo prints are slightly less saturated than the Epson L555, which has the best performance in this test. There's also a very slight yellow cast to the print.



There's a very slight yellow cast to the print.

### Page 10 of Printer Test Document (Text)

In making my selection I have chiefly tried to make the stories characteristic. It would have been easy, especially from Kennedy, to [vi]have made up a volume entirely filled with "Grimm's Goblins" á la Celtique. But one can have too much even of that very good thing, and I have therefore avoided as far as possible the more familiar "formulae" of folk-tale literature.

She was the creature of fairest form, of loveliest aspect, and of gentlest nature that existed between earth and heaven in all Ireland—whatever colour of hue she had before, there was nobody that looked into her face but she would blush fiery red over it.

"Well, Connachar, we will not accept that offer from you, nor thank you for it. Greater by far do we prefer to go home to our father and tell the deeds of heroism we have done, than accept anything on these terms from you. Naois, son of Uisnech, and Allen and Arden are as nearly related to yourself as they are to us, though you are so keen to shed their blood, and you would shed our blood also, Connachar."

The text is the sharpest among all three printers.

## PRINTER PERFORMANCE - EPSON L555

Print speed isn't the L555's strongest suit, with the L555 having a print speed of 9.9 pages per minute for monochrome documents, and a print speed of 3.8 pages per minute. For some reason, it took the Epson L555 quite a while to scan a 10-page full color document job, with the printer managing to get it done after 5 minutes and 22 seconds. Thankfully, it took only 36.05 seconds to scan an A4 full color photographic print.

The Epson L555 text print quality is the weakest among the three. It's fine for internal documents and some business documents, but it might not impress your business partners or clients as some of the text is noticeably less sharp than its peers. There are no problems with color documents, though it's very similar to the Brother MFC-J2720. Photo prints are the best among the three, with the Epson L555 producing vivid colors and accurate color casts.



Colors are vivid and accurate.

### Page 10 of Printer Test Document (Text)

In making my selection I have chiefly tried to make the stories characteristic. It would have been easy, especially from Kennedy, to [vi]have made up a volume entirely filled with "Grimm's Goblins" à la Celtique. But one can have too much even of that very good thing, and I have therefore avoided as far as possible the more familiar "formulae" of folk-tale literature.

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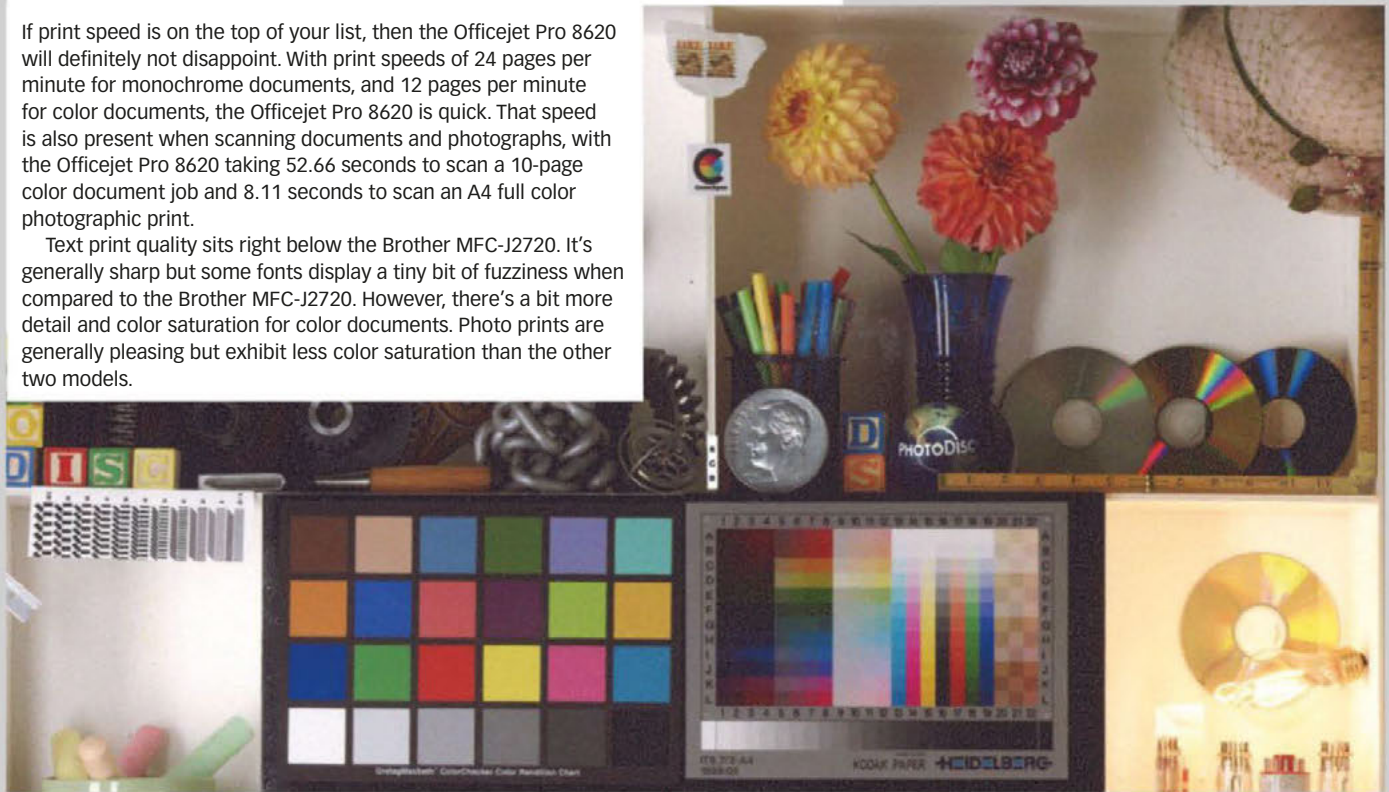
Some of the text is noticeably less sharp than its peers.



## PRINTER PERFORMANCE - HP OFFICEJET PRO 8620

If print speed is on the top of your list, then the Officejet Pro 8620 will definitely not disappoint. With print speeds of 24 pages per minute for monochrome documents, and 12 pages per minute for color documents, the Officejet Pro 8620 is quick. That speed is also present when scanning documents and photographs, with the Officejet Pro 8620 taking 52.66 seconds to scan a 10-page color document job and 8.11 seconds to scan an A4 full color photographic print.

Text print quality sits right below the Brother MFC-J2720. It's generally sharp but some fonts display a tiny bit of fuzziness when compared to the Brother MFC-J2720. However, there's a bit more detail and color saturation for color documents. Photo prints are generally pleasing but exhibit less color saturation than the other two models.



Colors are less saturated when compared to the others.

### HardwareZone.com / HWM Printer Test Document (Text)

In making my selection I have chiefly tried to make the stories characteristic. It would have been easy, especially from Kennedy, to [vi]have made up a volume entirely filled with "Grimm's Goblins" á la Celtique. But one can have too much even of that very good thing, and I have therefore avoided as far as possible the more familiar "formulae" of folk-tale literature.

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Text is generally sharp but some fonts display a tiny bit of fuzziness.

# AND THE BEST INKJET MFP IS



## **BROTHER MFC-J2720**

The Brother MFC-J2720 may not be the fastest in terms of print speed in this shootout, but it does pretty close to the HP Officejet Pro 8620 that makes it reasonably fast enough for most day to day demands. It's a great all-rounder in terms of print quality too, with very sharp text plus sufficient color saturation and details in color documents. As an office printer though, we feel that the outstanding feature that puts it ahead of the rest is its paper handling. Out of the box, you can already load up to 580 sheets in total and the only one capable of A3 printing.



# A THOR-NADO OF SOUND

## AudioBox Thor 7000

### AT A GLANCE

#### Type

5.1-channel speaker system

#### Connection

Auxiliary, PC, USB, SD card, Bluetooth

#### Total Power Output (RMS)

97W

#### Remote Control

Yes

#### Price

RM299



The back panel of the Thor 7000's subwoofer.

### CONCLUSION

The Thor 7000 is not without its flaws, but with its humble asking price, we might be willing to cast them aside.

### SPECIFICATIONS

**Woofer** 5.25-inch // **Drivers**  
Subwoofer/Bass unit: 5.25-inch, 8Ω  
Satellite unit: 3 inch, 4Ω // **Frequency Response** 40Hz ~ 20kHz // **Power Supply** 220-240V, 50-60Hz // **Warranty** 1-year // **Contact** Leapfrog Distribution Sdn Bhd (Malaysia) // **Telephone** (03) 7803 6703 // **URL** [www.leapfrogglobal.com](http://www.leapfrogglobal.com)

Sometimes, the inexpensive things in life are not always reliable, while the good things in life are not necessarily affordable – a notion that holds true today. Bearing that in mind, let's take an in-depth look at AudioBox's Thor 7000 5.1 speaker system. Priced at a very modest RM299, we can't help but wonder, is there a catch to the price? Let's find out.

Design-wise, the Thor 7000 isn't much of a looker with its monotonous black-on-black color scheme. The dreariness doesn't stop there; the concave design language of the speakers looks awkward at best, while the old-school seven-segment LED display on the subwoofer looks like it was transplanted from a digital clock.

The Thor 7000 has plenty of connectivity options for you to choose from: an auxiliary port, USB port, SD card slot, PC connectivity and even Bluetooth, but the latter requires a dongle

that does not come bundled with the speakers, which is rather unfortunate.

To get a good impression of the Thor 7000's sound quality, we made it play several music tracks from different genres, and noting down how well it handles the high, mid and low sound frequencies.

Out of the box, we found the default bass settings of the Thor 7000 a little too overwhelming for our tastes, but that was easily tweaked with the remote control that was provided. Strangely, there isn't a physical knob of some sort on the subwoofer to adjust bass levels – so you better not lose your remote control if you intend to tweak the speaker's sound!

Having altered the speaker's sound profile to our preference, we proceed with our test tracks. First off, the Thor 7000 handled the high frequencies of Kenny G's Jasmine Flower without a hitch, despite having the

volume cranked up to unhealthy listening levels. The speakers held themselves pretty well throughout the track and didn't show any signs of cracking or distortion, which is pretty impressive for a speaker of this price.

If rock music is your thing, you will be happy to know that the Thor 7000 is able to do your favorite rock bands justice. When faced with The Eagles' Hotel California, the Thor 7000 belted out plenty of detail and accuracy, from the subtle presence of the shaker, to the electrifying guitar solo towards the end of the song.

Bassheads, you will probably like what you hear as well, but on one condition: you don't push the subwoofer's bass setting to its limit. Ignore our advice and you'll have yourself engulfed by a torrent of bass that sounds overwhelmingly thick and muddy. We could even hear the subwoofer itself struggling to bellow the deep bass notes. We wouldn't declare that as major dealbreaker though, since most users would not need to pump the bass up that high to appreciate the sound quality of the speakers.

For RM299, it is no doubt that the Thor 7000 is a good buy considering its decent sound quality, but only if you are willing to overlook its awkward design and underwhelming bass issues.

by Peter Chu



TESTED & RATED

**8.0**<sub>/10</sub>

**HWM**  
MALAYSIA

Available at

**PLAZA LOW YAT**

## AT A GLANCE

**Type**

Portable Speaker

**Total Power Output**

20W

**Input**Bluetooth 4.0 / 3.5mm  
/ NFC**Remote**

No

**Price**

RM1,599



The Porto VII is simplistic, and that's okay with us.

## CONCLUSION

**The Porto VII is a big, beautiful speaker with a wicked sound system that will surprise even the most skeptical listener.**

## SPECIFICATIONS

**Speakers** 2x 5W satellite speakers, 1x 10W subwoofer // **Connectivity** Bluetooth 4.0, NFC, 1x 3.5mm in/out, USB charging port // **Battery Life** 8 hours playback (6 hours effective) // **Warranty** 1-year // **Contact** Leapfrog Distribution Sdn Bhd // **Telephone** (03) 7803 6703 // **URL** www.elysiumlab.com



# FULL METAL AUDIO

## Elysium Porto VII

Portable speakers. If you've ever played with them or even own one of them, then you know full well just how convenient and how different each of them can be. They come in different shapes and sizes, as well as varying audio qualities. So then, what makes the Elysium Porto VII any different from other portable speakers?

Design is always the first thing which we at HWM always talk about. It's usually a slight indication for us to see just how sensible the company is, and we weren't disappointed. Out of the box, you'll notice that the unit is built with a combination of metal and glass. The glass slate that is located on top of the speakers adds to the Porto VII's elegance, while the metal housing gives the device an equally elegant but solid feel.

One of the other things that you'll notice about the

Porto VII is that this particular portable speaker isn't as basic or as small as one would imagine it to be. The speaker actually measures out to the **size of a standard first aid kit**. It's not what you would call **easy or light to carry either**, but mercifully, that nice solid metal handle does allow consumers to lug it around with relative ease.

If there's one thing to be said about this pair of speakers, it's that it has several functionality and connectivity options. Like so many portable speakers before it, the Porto VII is not garishly over-designed or awkwardly built. It's been built for Bluetooth wireless connectivity, but there's also a 3.5mm jack for you to plug in your device if it lacks the Bluetooth option. Additionally, there's also a USB port embedded into the side of the speaker, which allows you to

charge your devices at the same time.

Lest we forget, the Porto VII is and was designed to be a portable speaker, which means that this device does have an internal battery. During our duration test, where we loop a list of our own song selections over and over, the battery gave us a little more than six hours on a full charge, and with the volume set at 65 percent.

The audio quality of the Porto VII was actually the most surprising aspect of our test. As it uses Bluetooth 4.0 technology, audio quality was still impressive. We tested the high and mid registers by playing songs with high-pitch tunes from Yoko Kanno's Diggin' My Potato and Joni Mitchell's A Case of You, to which there was no breaking. Sound placement was accurate, as was the precision of the instruments. For the bass, we played Nina Simone's Feeling Good, to which the bass woofer showed no signs of distortion in the speakers either.

by John Law

TESTED &amp; RATED

# 9.0/10

## HWM

MALAYSIA

Available at



# LISTENING TO CLOUD NINE

## HyperX Cloud II Gaming Headset

First of all, it's comforting to see the HyperX Cloud II gaming headset being designed more subtly than many of its outlandish looking counterparts. Apart from the HyperX logo emblazoned onto the outside of the ear cups, the HyperX Cloud II looks very much down to earth.

The memory foam earpads do a great job of shutting out ambient noise, but there is a catch. The intense squeeze that it has around the sides of your head to deliver that sound isolation can be a little uncomfortable, especially if you intend to use the headset for an extended period of time.

To find out how well the bundled USB sound card pairs up with the 53mm drivers of the HyperX Cloud II, we assigned it to play several music tracks that focused on the three main sound frequencies: highs, mids and lows.

First up was the highs, and the song of choice was saxophonist Kenny G's Jasmine Flower, which the HyperX Cloud II managed to reproduce flawlessly without hassle. The high notes of the saxophone were rendered in a sharp and crisp manner, and in no way did it overshadow the mellower music instruments.

With our sense of hearing on the line, we cranked up the volume to full blast and found no evidence of cracking or distortion, despite almost being rendered deaf by the ear-piercing sounds of Kenny's saxophone at maximum volume.

The mids, on the other hand, was tasked to the classic rock tune of The Eagle's Hotel California. Not only did the HyperX Cloud II manage to accurately pick up each of the many instruments in play, they were also replicated distinctly and with commendable clarity.

### AT A GLANCE

#### Type

Stereo / 7.1 Surround Sound

#### Driver Diameter

53mm

#### Noise Cancellation

No

#### Connection

3.5mm mini stereo jack

#### Price

RM409



The HyperX Cloud II comes with its own USB sound card.

### CONCLUSION

**The HyperX Cloud II is a genuinely good pair of headphones that delivers outstanding sound quality.**

### SPECIFICATIONS

**Sensitivity** 98±3dB // **Impedance** 60 Ω per system // **Cord** Wired, 1m + 2m extension // **Colours** Red, Gunmetal // **Warranty** 2-years // **Contact** Amble Action Sdn Bhd / Convergent Distribution (M) Sdn Bhd / Ingram Micro Malaysia Sdn Bhd // **Telephone** (03) 79686899 / (03) 2144 1881 / (03) 79528188 // **URL** www.kingston.com

Finally we have the lows, headlined by drum and bass group Pendulum's track, Set Me on Fire. The HyperX Cloud II breezed through the song with ease, despite being bombarded by bass and treble elements simultaneously. In case you were wondering, the bass is clean, solid and punchy enough to make your eardrums jitter itself to oblivion.

We then tried the 7.1 surround sound feature in several rounds of Counter Strike: Global Offensive. While the headphones do not give you pinpoint accuracy of where the sounds of gunshots were coming from, it does give you a general idea. The padded detachable microphone did a good job of cutting out wind noise despite having a table fan blowing directly at it, and according to my gaming buddy, it did a pretty decent job of transmitting my voice clearly.

All in all, despite the 'gaming' moniker, the HyperX Cloud II headset isn't purpose built for gaming enthusiasts, as music and movie aficionados will definitely also be able to appreciate the sublime sound quality of these stellar set of headphones.

by Peter Chu



TESTED & RATED

**9.0**<sub>/10</sub>

**HWM**  
MALAYSIA

Available at

**PLAZA LOW YAT**

# ONE EYE ON ALL

Sharp COCORO Eye TV



## AT A GLANCE

### 3D

No

### Speakers

2x 10W

### Resolution

1,920 x 1,080 (Full HD)

### Size

60-inch (Tested), 40-inch

### Price

RM5,699 (60-inch),

RM1,999 (40-inch)



This mode would scare the pants off an intruder, as it turns on if it detects movement.

## CONCLUSION

**Sharp's take on the Net TV is the COCORO Eye, which includes modes that turn it on and off automatically.**

## SPECIFICATIONS

**Video Signal** 1080p // **Connectors** 5x HDMI, 2x USB 2.0, 1x LAN connector, PC Input // **Features** COCORO Eye, Smart Power Control, Assist Light Mode, Smart Colour Adjustment, SRS Surround, AQUOS.NET, // **Dimensions** 1,691 x 920 x 200 mm (W x H x D) // **Weight** 27kg (w/ stand) // **Warranty** 1-year // **Contact** Sharp-Roxy Sales & Service Company (M) Sdn Bhd // **Telephone** 1 800 82 7867 // **URL** www.sharp.com.my

It's officially been a couple of years since the introduction of the first Internet-connected TV. As one would expect, home entertainment technology has since then evolved and morphed into TVs with their own features and proprietary technology. In this issue, we take a look at Sharp's new COCORO Eye TV, and find out just what it is that makes this Net TV so special.

The COCORO Eye TV that we reviewed was slim, thin and slender. Its base design is what Sharp refers to as the 'Scorpion' base design, and it actually works in ensuring that there's just no shaking with the TV, even when it is placed on a flat surface. But the heart and soul of this TV isn't the design, but the little peripheral that has been built in at the bottom of the TV, the COCORO Eye itself.

The really cool features though, are what Sharp has built into the TV to work together with the COCORO Eye. Some of the functions include Smart Power Control and Assist Light mode. To start, the Smart Power Control, as its namesake would suggest, is a function

that actually turns the TV on and off, and does so by sensing the presence within the room with the COCORO Eye. In other words, if the TV doesn't detect a presence within the room after a set amount of time, the TV will turn off the display, but leave the speakers on for a little while more before eventually turning off completely.

The second function, Assist Light mode, is actually a nifty little feature that Sharp says was designed to help people who get up in the middle of the night and need that little bit of light to help them see the way. To put it simply, the COCORO Eye will activate the Assist Light mode by mimicking a lightbulb, which is bright enough to let someone see where they're stepping at night.

In terms of image resolution, there is one drawback with the COCORO Eye series, and that they are only available in Full HD, and not UHD at the moment. While 4K resolution isn't exactly a necessity, the technology has already started becoming the norm for the majority of TVs, and we're actually rather disappointed

that Sharp has yet to implement that into the COCORO Eye TV lineup.

That being said, the picture quality of the COCORO Eye TV was as stunning as we had imagined it to be. When we played Robert Downey Jr.'s Sherlock Holmes, we were impressed to see that dark colors and contrast were nearly spot-on. The same could be said for Cloudy with a Chance of Meatballs, but in this movie, we noticed that there was a slight amount of oversaturation with the brighter colors.

by John Law

TESTED & RATED

**8.5**<sub>/10</sub>

**HWM**  
MALAYSIA

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TEL: (03) 2287 1177 FAX: (03) 2287 1166 WEBSITE: [www.okiprintingsolutions.com](http://www.okiprintingsolutions.com)

AT A GLANCE

Type

2.1 / 4.1 Soundbar

Total RMS

210W

Subwoofer Driver Size

6.5-inch

Remote

Yes

Price

RM3,199



Look ma, we're detachable, and intelligent!

CONCLUSION

**Owning the Fidelio B5 isn't just money well-spent. In our opinion, it's really an investment worth having.**

SPECIFICATIONS

**Sound Enhancement** Surround on Demand, Night Mode, Treble and Bass Control, Audio Sync, Auto Volume Leveller, Movie, Music, Near Listening, Voice // **Sound System** Dolby Digital 5.1, DTS Digital Surround // **Connectivity** Bluetooth aptX and AAC, NFC, HDMI 1.4 out (ARC), 2x HDMI in 1, 3.5mm Audio Jack, Digital Optical In, Digital Coaxial In // **Power Supply** 110 – 240V // **Drivers Per Main Bar** 2x 3-inch and 2x 1-inch Soft Dome Tweeters // **Warranty** 1-year // **Contact** Woox Innovations // **Telephone** 1 800 880 180 // **URL** www.philips.com.my

# SAME DESIGN, BETTER SOUND

## Philips Fidelio B5

We've said it before, and we'll say it again: today's modern living, lifestyle, and choice of living space leaves very little to be desired for the full-on home entertainment speaker systems. Soundbars have slowly, but surely become the norm, more so because of their ability to deliver powerful sound from a compact frame. Philips is a brand of which we've tested many of their soundbars, and in this issue, we test yet another soundbar model from them, the Fidelio B5.

Harsh as it may sound, but Philips' soundbars all look nearly identical. There haven't been many changes to the design of their soundbars over the last year. To put it in another way, the reason that their soundbars, the Fidelio B5 included, still maintain that all-black design with aluminum trimmings is because the company hasn't seen the need (as of yet) to deviate from a perfectly good design.

On the subject of design, the Fidelio B5 does possess a noteworthy feature, which is actually quite innovative, and it lies within its detachable speaker. Yes, these speakers can be detached from the main soundbar, and yes, they function wirelessly. Once

detached from the main soundbar, the speakers will intelligently raise their volume to match their distance from the soundbar, ensuring that no one speaker is ever louder than the other.

The audio of this soundbar is, for lack of a better word, impressive. The high registers of the Fidelio B5 is nothing short of amazing, which denotes a standardize quality within Philips' Fidelio speakers. During our testing, we played tunes with high pitch instruments, such as classical pieces like Vivaldi's Spring and even Yoko Kanno's Diggin' My Potato, and we found no traces of breaking, even when these songs reached glass-breaking pitches.

Mid registers were equally as impressive, as the voices from Nina Simone's Feeling Good and Stacey Kent's Venus de Milo sounded clear and audible. Sound precision was also very accurate on the Fidelio B5; throughout our testing, both the vocals and the instruments could be head in their individual state, and neither one of the two drowned out the other.

The bass of the Fidelio B5 is, suffice to say, not surprising to us. Over the last few soundbars that we tested

from Philips, their subwoofers were always up to par, and this one was no different. We played Austin Wintory's Journey composition, an album comprising many deep tones and double bass pieces to put the subwoofer to the test. We're happy to report that even on maximum volume, it showed no signs of distortion or breaking at any given point of our testing.

by John Law

TESTED & RATED

**9.0** /10

**HWM**  
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# FULL HD PROJECTION

BenQ W1080ST

The BenQ W1080ST is simple and modest. Its list of features is not long, but it hits all the right notes in the right places. It appears that BenQ has managed to produce a top contender in the home theater projector arena.

With smooth graphics, deep blacks, and faithful colors, the W1080ST impresses us with its image projection, especially when we took advantage of its Full HD resolution capabilities. And that was its performance right out of the box, before we had a chance to fiddle around with the settings.

As expected, the projection settings of the W1080ST are almost fully customizable. We say almost because for some reason, the color and tint settings can't be configured. However, other settings, including a number of preset modes, two-point grayscale, and advanced color

management system (CMS), are still present.

The W1080ST is a very good performer in a dark-room environment with relatively deep black levels and acceptable shadow details. It is also an adept performer when it comes to reproducing vivid, natural colors. But it is not just bright colors that look natural on BenQ as low-level ones looked decent as well.

The connectivity options on the projector are considerably generous for most purposes. For inputs, there are two HDMI ports, one of which is MHL compatible, a VGA port, a set of Component video, Composite video and audio ports.

Our favorite feature of all is that the W1080ST is also a short throw projector. When combined with its projection quality, this projector also becomes an ideal option for gamers and movie lovers who are looking for a big screen on

a budget.

Despite all the positives, there is still room for improvement. For example, although the W1080ST is advertised as having side projection capability, it lacks manual lens shift, which means you cannot move the lens itself to any of the four directions within the projector housing.

by Azizul Rahman Ismail

TESTED & RATED

8.5/10

HWM  
MALAYSIA

Available at

PLAZA LOW YAT

## AT A GLANCE

**Display Technology**  
DLP

**Brightness**  
2,000 ANSI Lumen

**Remote Control**  
Yes

**Screen Size**  
38-inch to 300-inch

**Price**  
RM4,299



With two HDMI ports, the number of connectivity options on this projector is considerably generous.

## CONCLUSION

If you are a gamer or a movie buff with limited space and budget, this is a projector that you must consider.

## SPECIFICATIONS

**Video Standards** NTSC, PAL, SECAM, SDTV // **HDTV Compatibility** 480i, 480p, 576i, 567p, 720p, 1080i, 1080p // **Interface** 1x D-Sub, 2x HDMI, 1x Composite Video in, 1x S-Video in, 1x Component Video in, 1x Audio mini-jack in, 1x Audio RCA in, 1x Audio mini-jack out, 10W speaker, 1x USB (Type B), 1x RS232, 1x DC 12V Trigger // **Native Resolution** 1080p (1,920 x 1,080) // **Dimensions** 312 x 104 x 244 mm // **Weight** 2.85kg // **Warranty** 2-years // **Contact** BenQ Service and Marketing (M) Sdn Bhd // **Telephone** (03) 7954 7800 // **URL** www.benq.com.my

AT A GLANCE

**Water Resistance**  
200M

**Communication**  
Bluetooth 4.0

**Battery Life**  
Approx. 2 years

**Price**  
TBA



The G'Mix app offers Soundhound identification, music playback and a Sounder function to play with audio effects.

CONCLUSION

**A decent 'smart' watch for G-Shock aficionados, but needs wider software functionality.**

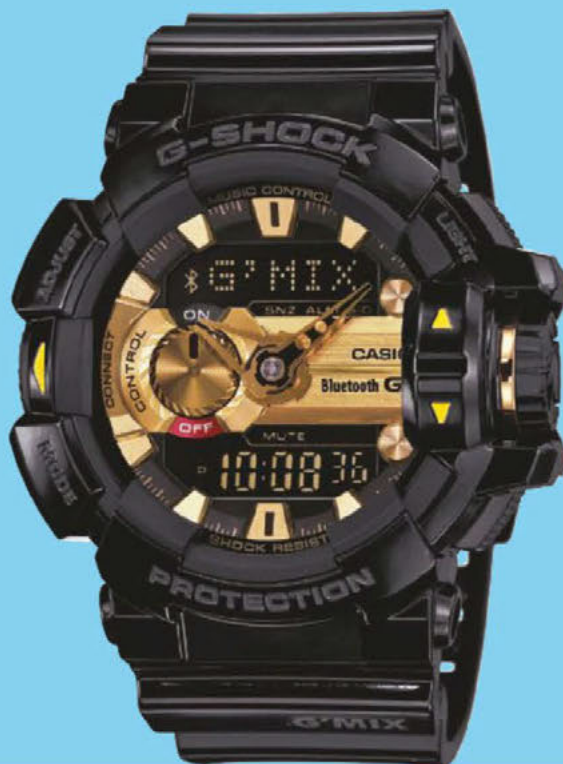
SPECIFICATIONS

**Case / Bezel Material** Resin // **Features** Shock resistant, LED light, flash alert, hand shift, Bluetooth Smart, Airplane mode, world time, 1/100-second stopwatch, countdown timer, daily/one-time alarms // **Dimensions** 55 x 51.9 x 18.3 mm // **Weight** 66g // **Warranty** 1-year (additional 6-months w/ e-warranty) // **Contact** Marco Heritage Sdn Bhd // **Telephone** (03) 4043 3111 // **URL** www.casio-intl.com

TESTED & RATED

**8.0** /10

**HWM**  
MALAYSIA



# EVEN TOUGH GUYS NEED MUSIC

**Casio G'Mix GBA-400**

The G'Mix GBA-400 series represents one of Casio's newer efforts to move into the smartwatch era with targeted connected functionality. Casio calls this Mobile Link, which is basically 2-way control via Bluetooth Smart (Bluetooth 4.0) with the G-Shock+ companion mobile app. This isn't the first Casio watch with Bluetooth, but the GBA-400 is their first dedicated music control watch. It even comes with its own G'Mix app, which I'll get to later.

The GBA-400 is an analog watch with two digital displays. By default, they show time and date. When connected to either the G-Shock+ or G'Mix apps, the top display shows control info such as song title. The GBA-400 has five buttons and one dial. Of these, the large middle button activates Bluetooth, which the dial can

be mapped to music control. Just remember that it isn't a crown to set the analog hands, so don't try pulling it out. As G-Shocks go, the GBA-400 is quite modern with metallic accents on the face balancing the shiny plastic case and bezel. The face also has this fancy rotary wheel with On/Off markings to indicate Bluetooth status; a cool cosmetic touch.

As for apps, G-Shock+ is a universal control app for all Casio Mobile Link-enabled watches. When paired with the GBA-400, it offers date/time, alarm settings, phone finder and basic music controls. This allows the watch to act like a standard Bluetooth remote, but may not work on all types of music apps on your phone. If the app detects the GBA-400, you'll be prompted to install the G'Mix app instead, a dedicated music player with

more full-fledged features such as equalizer settings and baked-in SoundHound search engine. You can now identify songs by pressing a button on your watch without bringing out your phone. The downside is that the app can only play local music files. Hopefully, Casio has plans to expand this functionality because if you stream most of your music from cloud services such as Spotify, you'll get very limited use out of it at the moment.

One last thing to note, since the GBA-400 is a standard watch with smart features, it runs off regular batteries, which is supposed to last a good two years with moderate Bluetooth usage. Now, that's something I can get behind.

by Zachary Chan



# TP-LINK®

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*Archer C2*



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3 times faster than wireless N speeds and higher power efficiency and robust security.

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Ultrafast data transfer speeds

**4 USB port**

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**5 2 detachable external antennas**

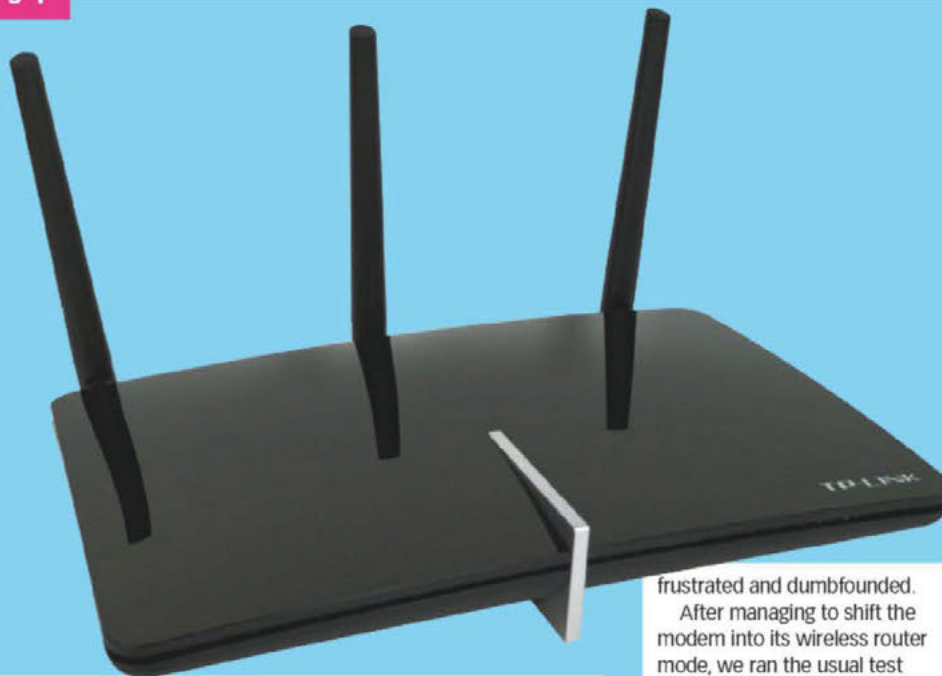
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# SHOOTING FOR THE STARS

## TP-Link Archer D2

The Archer D2 is the entry-level model of TP-Link's Archer line of routers. We had the opportunity to test both the range-topping Archer D9 and the mid-range Archer D5 a few months ago, so let's find out what separates the Archer D2 from its older siblings.

Take a quick look at the Archer D2 and you will immediately notice that it looks identical to its elder brother, the Archer D5, even in terms of dimensions. Unfortunately, just like the D5, the top of the D2 is also a fingerprint and dust magnet, no thanks to its glossy surface. Apart from that, the Archer D2 looks like an elegant router, especially when the LED indicators light up in a soft shade of white during use.

Located on the rear of the Archer D2, you will find a power socket, the usual share of connectivity ports and several buttons on the back of the Archer D2. There are three RJ45 LAN ports, an interchangeable LAN/WAN port, a RJ11 port and a USB 2.0 port. The latter allows you to connect devices like a

USB drive or a printer and make them accessible wirelessly across the network. A WPS button, a power and Wi-Fi on/off button, and a reset button completes the rear of the Archer D2.

Setting up the Archer D2 might be a little confusing for those who intend to use it as a wireless router. This is due to the Archer D2 only being able to operate in either a DSL modem router mode, or a wireless router mode. Out of the box, the Archer D2 is pre-programmed to operate in DSL modem router mode, with the provided quick installation manual only listing down the steps to set up the Archer D2 in that respective mode.

To setup the Archer D2 as a wireless router, you will need to first change it to that mode through the Archer D2's interface accessible via a web browser. Only then will you be able to proceed through the quick setup process. Diligently following the manual to set up the Archer D2 as a wireless router will only leave you

frustrated and dumbfounded.

After managing to shift the modem into its wireless router mode, we ran the usual test of timing how long it takes to transfer a 1GB file from the company's server to our notebook PC at distances of five, 10 and 20 meters.

The five-meter file transfer took nine minutes and 35 seconds, the 10-meter transfer took a shorter nine minute and six seconds, while the 20-meter file transfer took nine minutes and 14 seconds. Looking at the results, we are happy to see the Archer D2 deliver stable and consistent transfer speeds across the different distances, presumably due to the presence of Beamforming technology.

All in all, the TP-Link Archer D2 is a modem router that not only looks good, but also delivers respectable network performance despite being classified as an entry-level model.

by Peter Chu

TESTED & RATED

**8.0**<sub>/10</sub>

**HWM**  
MALAYSIA

Available at

**PLAZA LOW YAT**

### AT A GLANCE

#### Standards

802.11ac/n

#### Ports

1x RJ45 WAN/LAN, 3x RJ45 LAN, 1x RJ11, 1x USB 2.0

#### Antenna

3x External

#### Frequency

2.4GHz and 5 GHz

#### Price

TBA



This was the source of our trouble while setting up the Archer D2.

### CONCLUSION

**Apart from the minor setback that we experienced setting up the router, the TP-Link Archer D2 is without a doubt a capable performer that comes in a very good-looking package.**

#### SPECIFICATIONS

**External Power Supply** 12V DC/1.5A

// **Transmit Power** <20dBm (EIRP)

// **Operating Modes** ADSL modem

router, wireless router // **Warranty**

2-years // **Contact** Lab Seven (M) Sdn

Bhd / AdvanceNet Technology Sdn Bhd

// **Tel** (03) 8075 8811 / (03) 8070 3633

// **URL** www.tp-link.com.my



# PERFECT FOR PHOTO

## Epson L850

### AT A GLANCE

**Type**  
Multifunction Inkjet  
Printer

**Print Speed**  
Approx. 37 ppm (mono) /  
38 ppm (color)

**OS**  
Windows, Mac OS X

**Print Resolution**  
5,760 x 1,440 DPI (with  
Variable-Sized Droplet  
Technology)

**Price**  
RM1,298



There's a 2.7-inch color LCD for users to print, scan or copy directly from the printer.

### CONCLUSION

**With the Epson L850, users can enjoy high-quality photo prints and more, without burning a hole in their pockets.**

### SPECIFICATIONS

**Interface** USB 2.0 // **Print Direction** Bi-directional and uni-directional printing // **Double-sided Printing** Yes // **Built-in Slots** SD card // **Display** 2.7-inch TFT color LCD // **Warranty** 1-year // **Contact** Epson Malaysia Sdn Bhd // **Tel** (03) 5628 8288 // **URL** [www.epson.com.my](http://www.epson.com.my)

Over the years, Epson has continued to be one of the leading brand innovators in the printer industry. The company's new 3-in-1 photo printer, the L850, is designed to deliver borderless prints, along with direct copying, scanning and an excellent page yield of up to 1,800 4R photos, thanks to Epson's original ink tank system, which starts at RM36 per bottle. Will the savings you achieve translate to quality prints?

The L850 is essentially the L800 photo printer with multifunction versatility. It retains the 6-color ink tank system, while made taller mainly due to the addition of a flatbed scanner. On the front, you'll find a tiltable control panel and a 2.7-inch color LCD screen for immediate accessibility. But that's not all, as underneath the control panel is an SD card slot and USB 2.0 port, allowing users

to print, scan and copy photos or documents directly from the multifunction device without the need for a PC and drivers' installation. It also prints directly onto a CD/DVD's printable surface. However, we were a tad disappointed that it did not support wireless printing.

The star attraction of the L850 is undoubtedly its ink tank system, which allows users to print up to 3,000 B&W and 5,400 color pages. Furthermore, the refilling process is also made easy, seeing as the ink tanks are fitted with individual filters and caps. When combined with Epson's Micro Piezo printhead technology and VSDT (variable size droplet technology), the L850 is capable of producing high-quality photo prints – up to a resolution of 5,760 DPI. This is great news for creative professionals or photographers as they can now print

borderless photos from home, at a fraction of the cost.

To test the performance of the L850, we put it through our standard testing procedures for printers. For 25-page monochrome text document and 25-page color text document, the L850 took about one minute and 35 seconds, as well as four minutes and 20 seconds, respectively. Impressive speeds aside, we also printed a number of photos in various sizes to test its photo printing capability, and the photos came out splendidly, rich in details with rather accurate colors.

On top of that, we also tested the L850's scanning capabilities by scanning the cover page of HWM, which took eight seconds to complete. The result was reasonably good, with acceptable amount of details.

by Ammar Uzair Aminuddin



TESTED & RATED

**8.5**<sub>/10</sub>

**HWM**  
MALAYSIA

#### AT A GLANCE

##### Dimensions

340 x 239 x 20.9 mm

##### Weight

1.80kg

##### GPU

NVIDIA GeForce GTX 970M (3 GB GDDR5), Intel HD Graphics 4600

##### OS

Windows 8.1 64-bit

##### Price

RM6,399



It's so small and slim, don't feel bad if you mistook it for an Ultrabook.

#### CONCLUSION

**Powerful but compact and understated, the Gigabyte P34W v3 is for gamers who travel a lot and would like one machine for both work and play.**

#### SPECIFICATIONS

**CPU** 4th generation Intel Core i7-4720HQ  
// **Audio** Dolby Digital Plus Home Theater Edition, built-in stereo speakers // **Display** 14-inch Full HD (1,920 x 1,080), 16:9 aspect ratio, wide viewing angle LCD // **Memory** 8GB DDR3L // **Storage** 128GB SSD, 1TB HDD // **Warranty** 2-years // **Contact** ILLEGAR Sdn Bhd // **Telephone** (03) 7610 0987 // **URL** www.gigabyte.my



# STILL WATERS RUN DEEP

## Gigabyte P34W v3

Gaming notebooks of late tend to be pretty flashy – mostly aesthetically, sometimes literally. Many of them are not only made to be powerful, but to also attract as much attention to the exterior of the machine as possible. Gaming notebooks by Gigabyte, however, don't really follow this trend, and the P34W v3 is no exception.

At first glance, it looks like any other thin notebook. You might even mistake it for an Ultrabook, in fact. Measuring at 340 x 239 x 20.9 mm and weighing 1.8kg, it sure is small and light enough to pass as one. It is also understated enough to get people to mistake it for an Ultrabook; it has no sports car-esque exhaust vents sticking out of the rear, nor does it blind you with neon lights of every color of the rainbow. Its exhaust system is basic looking on the outside but is still does

its thing to keep heat under control. You do get some lights under the keyboard, which come in three settings; off, bright and brightest.

Of course, under that bare-basic body is a 4th generation Intel Core i7-4720HQ processor, NVIDIA GeForce GTX 970M graphics and 8GB worth of RAM. It comes with a few storage options, but the review model we had came with a 128GB SSD and a 1TB HDD. You also have everything you need to treat it like an actual Ultrabook and do some work on it; it has four USB 3.0 ports, a HDMI port, an audio port, an SD card reader, a D-sub port and a LAN port, the last of which is getting rarer and rarer among thin gaming notebooks. It also has a 15.2V, 61.25Wh battery, which will last you five minutes short of three hours of continuous work-related tasks, like document and spreadsheet editing.

As for its gaming performance, it obtained a score of 6,729 and 3,400 on Futuremark's 3DMark Fire Strike and Fire Strike Extreme, respectively. On PCMark 8's Home and Creative suites, the P34W v3 scored 3,635 and 4,479, respectively. We also ran Batman: Arkham Origins' built-in benchmark, where the P34W v3 yielded an average 63 FPS.

The Gigabyte P34W v3 is a very likeable notebook. 14-inch notebooks are really hard to come by today, and while it may not have a touchscreen to match the Windows 8.1 OS that it comes with, it does come in Full HD resolution, which is perfect for image clarity without draining too much video processing power. Its modest exterior attracts little attention, and the reasonably long battery life lets you do some work on it without passers-by wondering why are you doing mundane work on a gaming notebook.

by Ian Chee

TESTED & RATED

**9.0**<sub>/10</sub>

**HWM**  
MALAYSIA



# BEAUTY AND BRAWN

## Linksys EA9200 AC3200 Tri-Band Smart Wi-Fi Router

Linksys believes that nobody should have to put up with the agony that comes with a slow Internet connection. Their solution to this pertinent issue is the Linksys EA9200 – a powerhouse of a router that is more than capable of handling all your networking needs.

The EA9200 is a tri-band smart Wi-Fi router, which means there are two speedy 5GHz bands and a 2.4GHz wireless band available to satisfy your need for speed. The EA9200 earned the 'smart router' moniker because of its ability to optimize the speed and automatically balance the

bandwidth between the two 5GHz bands.

The presence of a 1GHz dual-core CPU helps the router cope with massive data streams, thus preventing a drop in speed or performance while under heavy load. For maximum wireless stability, the router comes packed with an impressive six antennas – three removable external directional antennas on top of the router, and three internal antennas.

Aesthetically, the EA9200 looks like a well-crafted router. The brushed metal finish of the plastic that runs vertically along the middle of the router

exudes a sense of refinement, and stands out against the predominantly black colored chassis. Without the external antennas attached, it is relatively easy to mistake it for a premium speaker dock.

At the back of the router, you will find the usual suspects – four gigabit Ethernet ports, an Internet port, two USB ports (one USB 3.0, one USB 2.0), a power socket, a power switch and a reset button. The USB ports allow you to, for example, plug in a USB flash drive and access its content wirelessly like you would a media server; or a printer to make it accessible by users on the same network.

Setting up the router was a breeze. The step-by-step manual provided with the router was straightforward and simple to understand. It only took us a couple of minutes to get the EA9200 up and running, with the final step being done via a web browser. When the router is configured correctly, the Linksys logo that's engraved onto the strip will glow white; otherwise, it would start flashing as a signal for intervention.

To gauge the wireless performance of the EA9200, we made it perform several large file transfers over distances of five, 10 and 20 meters, respectively. The router managed to transfer a 1GB test file over a distance of five meters in four minutes and 22 seconds, while 10 meters took five minutes and 45 seconds, and 20 meters took a shorter five minutes and 22 seconds in our test lab.

With that being said, the EA9200 is a sleek, no-nonsense router that not only delivers in terms of performance, but also in terms of design.

by *Peter Chu*

### AT A GLANCE

#### Standards

802.11ac compatible with a/b/g/n

#### Ports

4x LAN, 1x RJ11, 1x USB 2.0 and 1x USB 3.0

#### Antenna

3x External, 3x Internal

#### Frequency

Two 5GHz, one 2.4GHz

#### Price

TBA



An array of ports at your disposal

### CONCLUSION

**A router that excels in performance and looks, which doesn't come by often.**

### SPECIFICATIONS

**External Power Supply** 12V DC/4A // **Operating Modes** Modem router, wireless router // **Warranty** 1-year // **Contact** Glocomp Systems Malaysia Sdn Bhd // **Tel** (03) 7652 1188 // **URL** www.linksys.com

TESTED & RATED

**8.5**<sub>/10</sub>

**HWM**  
MALAYSIA





# THE INTERNET OF THINGS

Y.S. Jeon, president and CEO, Samsung Electronics South East Asia & Oceania, discussing Internet of Things at the Samsung Southeast Asia Forum 2015 press conference.

TAP FOR  
GALLERY 

## SAMSUNG SEA FORUM

Korean giant showcases 2015 product lineup, ranging from home appliances to the new NX500.

BY IAN CHEE

Last month, we were at the Samsung SEA Forum, where the Korean giant usually shows off the products it plans to bring into the regional market. Held at the IMPACT Forum in Bangkok, Thailand, this year's edition of Samsung SEA Forum saw the presence of representatives from all over Southeast Asia, as well as the Oceania region.

Of course, this being the Samsung SEA Forum, the company intends to show off more than just smartphones and televisions. What we found were a wide range of appliances that include a new washing machine and a vacuum bot, as well as the NX500 compact camera. Not all of them will be coming to Malaysia, however, and even for those that will eventually reach our shores; Samsung is hesitant to provide a figure in terms of local pricing. What we do get is the knowledge that those that are coming here will arrive by the first half of 2015. But for now, let's take a look at some of the highlights.



## SUHD TV

Even before CES 2015, Samsung has stated that all of its smart TVs entering the market this year will be powered by the Tizen OS. This allows for all sorts of Smart Home and Internet of Things (IoT) wizardry to take place, with Samsung's TVs playing quite the part in it. The new feature Samsung shown off this time around is what it calls the Morning Brief. When paired with one of the newer Samsung GALAXY devices, a Samsung smart TV that has been paired can turn itself on when the alarm on the GALAXY device rings, and will proceed to provide you with information, such as the current weather and your schedule for the day.



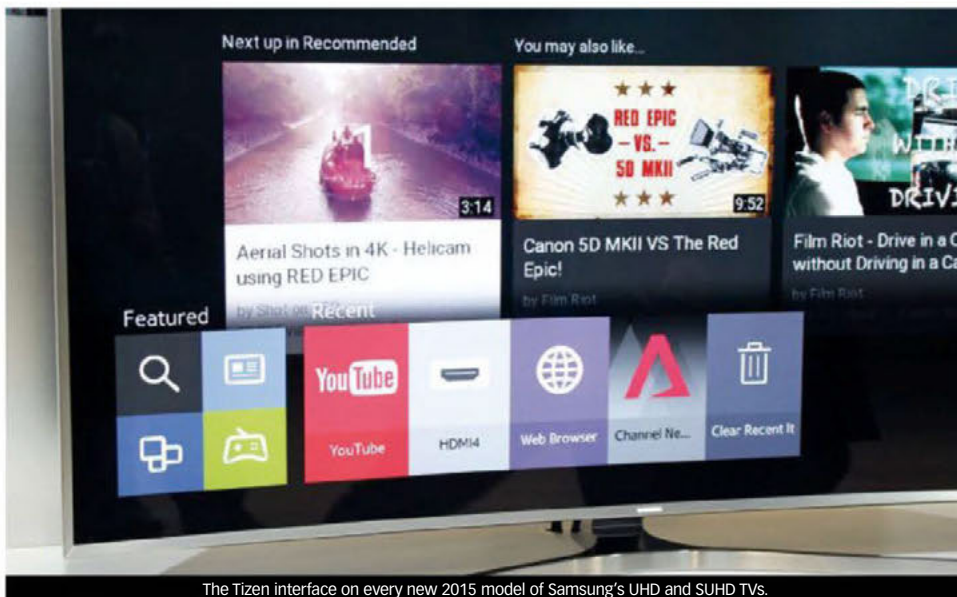
Expect this curved TV to cost significantly more than the rest.



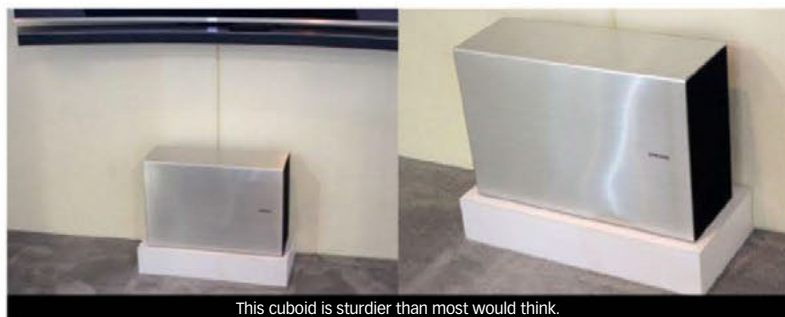
In case you were wondering what the 'S' in SUHD stood for.



Samsung wasn't kidding when it said it was committed to the IoT ecosystem.



The Tizen interface on every new 2015 model of Samsung's UHD and SUHD TVs.



This cuboid is sturdier than most would think.

## 8500 Series Curved Soundbar

To go along with the curved SUHD TVs are the similarly curved soundbars. The Samsung SEA Forum saw the introduction of the 9.1-channel 8500 series. Boasting a power output of 350W, it comes with an 8-inch wireless subwoofer. According to Jason Foo, Head of AV, AV Business Unit, Samsung Malaysia Electronics, Malaysian users often slip the woofers of home theater systems under their sofas, and Samsung has taken that in mind when coming up with the design of the soundbar's woofer. Not only is it relatively thin compared to others of its kind, it is also quite sturdy, being able to take up to 100kg pressing on it. This means if you couldn't slide it under your seat, you can possibly use it as one itself.





### Activ Dualwash

Some of us still do our laundry entirely by hand. Most others who use washing machines still have to deal with manually prewashing clothing from time to time. The bit in between the prewashing and chucking everything into the washing machine can be a tiresome – and sometimes tiring – one. Samsung aims to get rid of that bit with its new series of washing machines. Dubbed Activ Dualwash, these top-loading washing machines come with a washboard-sink under the top lid, which you can detach and do your prewashing on. The washboard is made of polymethyl methacrylate (PMMA), sometimes called acrylic glass, so it can take some pretty rough treatment.



### NX500

Finally, on the imaging front we have the NX500. Inheriting many of the specs figures of the NX1, the NX500 boasts a best-in-class DRIMeV Image processor, an NX AF system III and Samsung's 28-megapixel BSI APS-C sensor. All of this is packed in a smaller body for easier handling and transporting. Capable of up to 9 FPS continuous shooting and 4K recording, the NX500 also comes with wireless connectivity options like Bluetooth and Wi-Fi so that you can share your shots almost immediately after they are taken.



This 3-inch Super AMOLED touchscreen has what Samsung calls the Tilt and Flip function. The latter for selfies, obviously.

### Omni-directional 360 Audio

Next in line on the audio department are the Omni-directional 360 Audio speakers. These come in two models: the WAM7500, which is shaped like a rugby ball and the WAM6500, which looks more like a bell. These were made to solve an issue prevalent with most conventional speakers: the need for the listener to be in an audio sweet spot for the optimal experience.

Using Samsung's proprietary Ring Radiator technology, the Omni-directional 360 Audio speakers are said to be able to project sound in a 360-degree radius, while maintaining perfect sound staging, as well as balance between treble and bass. It is also apparently possible to scatter multiple units around the house, and have them all paired to a smartphone so that when you move from one room to another, the speakers in the room you are about to enter powers up and plays your tunes while the one in the room you just left powers down. This theoretical scenario means an uninterrupted listening experience, though whether or not it works in actual practice remains to be seen.



With a built-in battery, the WAM6500 is also a portable speaker.

### POWERbot

Samsung also has a vacuum bot. This particular bot has a suction power of 30W, which they say is 60 times more powerful than other vacuum bots. Aside from the usual features that come with things like this – such as smart pathing and scheduled cleaning, the POWERbot also comes with a remote control that has a laser pointer on it. This will let you target a specific area within the bot's vicinity that you want cleaned, and the bot will wander over the point and do its thing, carefully



avoiding obstacles, unscalable ledges and wet patches. Speaking of unscalable ledges, the POWERbot has what is called Easy Pass, which lets it climb over small ledges by pushing one of its wheels down, increasing clearance height. Another feature Samsung boasts on the POWERbot is what it calls Cyclone Force, which whirls everything vacuumed in like a mini cyclone, breaking up clumps of dust.

This event report can also be found on [hardwarezone.com.my](http://hardwarezone.com.my) at [bit.ly/1vr8rqN](http://bit.ly/1vr8rqN)



TELEPORT

# DEALING WITH TROLLS

Twitter CEO takes full responsibility of the abuse and trolls on the platform.

MORE  
INSIDE >

## TEAM ASSEMBLE!

OnePlus officially announced team behind OxygenOS.

## MUM'S THE WORD

Apple targets accessory makers to curb leaks.

## MULTI-LAYERED INGENUITY

We reviewed the Lenovo VIBE X2.

## STAYING IN THE LOOP

Hyperloop Technologies secured US\$8.5million in fundings.



85  
HOT SHOTS



## JOHN LAW

Mobile Adventurer Extraordinaire

Smartphones or tablets, it doesn't matter. When not occupied with watching a YouTube video or movie on his mobile devices, this man is busy trying some newly designed app from the Google Play Store or simply just chatting away on whatever social media app that is currently being used. On top of that, you can also see him making gestures at his desk while listening to classical music on his favorite radio app.

## SMARTPHONES & TABLETS

When it comes to smartphones and tablets, we prefer letting our readers know how the devices we review appeal to us in terms of performance, design, features and other aspects such as battery life, usability and its overall value. To test these devices we replace them with our own daily use devices and use them as we would any smartphone or tablet.

As for Android based devices, we use a trio of benchmarks to gain a more tangible idea of their performance and these include:



- **AnTuTu Benchmark:** At the moment, AnTuTu is one of the best benchmarks

as it is a complete package that gives us an all-round hardware test that includes the likes of Memory Performance, CPU Integer Performance, 2D and 3D Graphics Performance, SD Card Read/Write Speed and more.



- **Quadrant Standard Edition:** Ever since Quadrant was released, it has

become a staple in the arsenal of smartphone and tablet reviewers as it provides a comprehensive set of tools that test the performance of a device's CPU, I/O and 3D graphics.



- **Epic Citadel:** We reserve Epic Citadel for devices that fall in the high-end and mid-range categories as this benchmark

truly shows the capabilities of a device's GPU. Powered by the critically acclaimed Unreal Engine 3, Epic Citadel features effects such as Global Illumination, Dynamic Specular Lighting with Texture Masks, Vertex Deformation, Skeletal Animation, etc.

## MOBILE NETWORKING



Mobile networking devices such as 3G/4G dongles and MiFi devices are fast becoming hot commodities as our appetite for data consumption continues to grow. Depending on the device type, here are the two tests we commonly use to gauge their performance:

- For devices capable of sending and receiving data packets such as a mobile router with a LAN port, we use our standard 1GB file transfer test at various ranges to see how stable and fast the connection is.
- As for devices that rely on a mobile operator's signal strength such as MiFi devices, we test them around the Klang Valley to provide you with a better picture of the service as a whole. For devices like these, we also rely on the Speedtest.net application or website to discover its Download, Upload and Ping rates.

## ACCESSORIES

To gauge the performance and features of accessories such as docks, speakers, Bluetooth headphones and wired headphones, we use our standard audio testing suite which lets us know just how well a device handles music from different genres. We normally play audio tracks from various sources and in various formats but we usually rely on a few artists which include:

- **Yoko Kanno**
- **Joanna Wang**
- **John Mayer**
- **Jon Bon Jovi**
- **Nightwish**

If the device has a microphone or works as a speakerphone, we also test it by making actual phone calls. After all our tests, we then explore other areas such as stress-handling, usability, design and value.





# MUM'S THE WORD

Apple Tackles Possible Device Leaks  
By Targeting Accessory Makers

Apple has had just about enough with the Internet and third parties leaking out information about its new and upcoming devices to the public. To curb the problem, they're going straight to the source of these supposed leaks: accessory makers.

This action isn't all that surprising, as it has unofficially become common knowledge that some errant accessory makers have been marked by Apple themselves, mainly for being the culprits who contribute to the product leaks by "borrowing" factory blueprints of these upcoming devices from Cupertino, under the guise that they could produce the accompanying accessories and cases, well ahead of the product's release.

Well, one of the first steps that Apple is taking to combat the problem is by making these accessory makers sign agreements that prevent

them from getting design details from anyone but Apple themselves. Simply put: if one of these accessory makers break any rule of the agreement, Apple can and will reserve the rights of an outright refusal of stock for any of these accessory makers who didn't follow the rules.

This may seem like a small problem to everyone except Apple, but the long-term effect of this agreement means that official schematics of any upcoming Apple devices won't show up until after an announcement has been made, which in turn, means that accessory makers will only be able to make the accompanying accessories for these devices several weeks after the announcement. In other words, this could very well lead to a classic case of high demand with a virtually non-existent supply.



Apple is trying to curb product leaks by going after accessory makers. (Image source: 9to5Mac)



## GOING PLACES WITH AIRASIAGO

AirAsia's New App Lets You Book a Flight and Hotel Room of Your Travel Destination

AirAsia has expanded its online portal and introduced the long-awaited app, AirAsiaGo. The app is essentially a mobile platform that's designed to provide fast and efficient solutions for last-minute travel bookings, as well as cater to the needs of the budget-conscious and bargain-hunting travelers.

"We believe in adapting to the changing travel booking behaviors of our customers who are spending a lot of time on their smartphones and tablets. As a forward-thinking company, we find that web is the 'now,' and mobile is the future," said Kathleen Tan, CEO of AAE. "With the AirAsiaGo mobile app, travelers can now browse, navigate and make bookings easily from one application, as well as customize their individual travel needs, all in real time."

The AirAsiaGo app was developed by top engineers at Experia Inc., one of the world's leading technology companies, at their headquarters in San Francisco. The company is also in charge of handling local content and currency exchange rates in Malaysia, Singapore, Hong Kong, Thailand, Indonesia and China.

"One of the many benefits of having this joint-venture between AirAsia and Expedia was for AirAsiaGo to leverage on the state-of-the-art technology from Expedia in developing not just the mobile app, but also to build a world-class e-commerce web technology platform. We have seen significant improvements to the conversion rates, as well as the average booking value of the business since taking on the new technology."

Kathleen Tan, CEO of AirAsiaExpedia (AAE), celebrating the Travel Innovation & Technology launch with the AirAsiaGo team together with Darren Goh, General Manager of AirAsiaGo and David Yong, Head of Product of AirAsiaExpedia.

# NO STRINGS ATTACHED

Apple App Store Has a Dedicated Section for 'Pay Once and Play' Games

■ The world of mobile gaming can be a source of fun and, more often than not, a source of financial heartache for those hardcore mobile gamers and parents who don't monitor their children's in-app activities. It's even worse when the game in question misleads you into thinking that the game is free, and only after you've downloaded it, will it then prompt you into buying the full game before being allowed to proceed any further.

Luckily for us, Apple has created a simple, yet very practical solution to combating these deceitful apps and their developers, and that is by dedicating a section on the App Store to games that can be enjoyed thoroughly without any additional in-app purchases. Apple has named the new section 'Pay Once and Play', and some of the games that are

currently listed inside that category include XCOM: Enemy Within, Monster Hunter Freedom Unite, Threes, Thomas Was Alone and Minecraft, amongst others.

Apple previously made some alterations to how 'freemium' apps were displayed on the App Store, where unique labels are added to freemium games that require in-app purchase, and even went as far as changing the 'Free' button on these games.

At the time of publication, the 'Pay Once and Play' section is only available in the U.K. App Store. The U.S App Store is due to receive the update very soon as part of the App Store's weekly refresh. No word has been given on when this new section will be available for the Asia region.



There is now a dedicated games section on the App Store for 'Pay Once and Play' games.

## BYTES

### Microsoft Completed Acquisition of Sunrise Calendar App

Microsoft officially concluded its US\$100 million (approx. RM361 million) acquisition of the popular calendar app for Android and iOS called Sunrise. This recent purchase followed closely on the heels of the launch of the Outlook app, which is essentially just a re-branded version of the email app, Acompli. Sunrise is arguably one of the best calendar apps available because of its beautiful and user-friendly layout design. The app enables users to import their schedules from iCloud, Google Calendar, as well as information from other third-party apps.

### SanDisk Officially Announced iXpand Flash Drive for iOS Devices

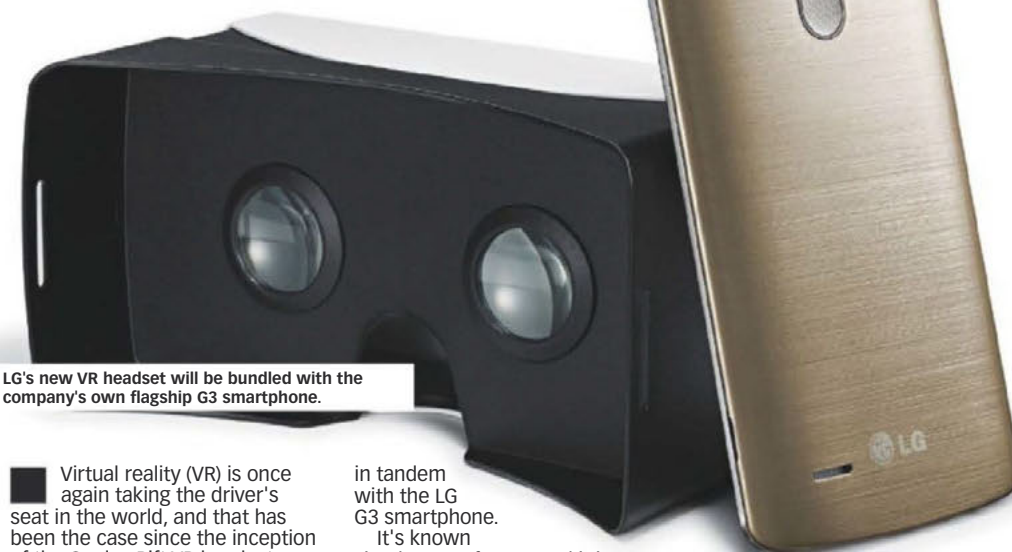
SanDisk announced its iXpand USB flash drive, which is specifically designed to work with iPhones and iPads. The drive features a standard USB connector, as well as a Lightning connector, allowing it to connect to the aforementioned iOS devices. Files can then be accessed and copied using the accompanying iXpand sync app. The app launches automatically when the drive is plugged in and can be configured to automatically sync photos and videos from the Camera Roll to the drive for easy transfer and backup.

### WhatsApp Testing Voice-Calling Feature on Android

WhatsApp is hinting at the availability of the app's voice-calling feature. It is still underway and there's no further detail on a wider rollout, but some Android users first encountered the feature last week when a button emerged in the latest version of the app. This feature will enable users to make voice calls to their contacts the same way they would send a message. This gives users the ability to make phone calls, provided they have an active Internet connection.

# WORLD OF 3D

LG Announces its Very Own VR Headset for the LG G3



LG's new VR headset will be bundled with the company's own flagship G3 smartphone.

■ Virtual reality (VR) is once again taking the driver's seat in the world, and that has been the case since the inception of the Oculus Rift VR headset, which was developed hand-in-hand with the company's Chief Technology Officer, John Carmack.

Needless to say, companies like Samsung wanted a piece of the pie, which prompted them to develop a VR headset that would work together with the GALAXY smartphones. Now, it seems LG is also getting into the swing of things, as the company has announced the development of its own VR headset that will work

in tandem with the LG G3 smartphone.

It's known simply as VR for G3, and it is essentially a plastic headset that will let you slide the phone into it, with special holes for the phone's volume keys. The VR headset has clearly taken its inspiration in the design from both Google's papercraft-esque Cardboard, as well as from Samsung's own VR headset. Like the Cardboard, the VR for G3's plastic hardware comes with a neodymium ring magnet on the side that pairs up with the G3's internal gyroscope, letting you

control your phone without touching the display.

Currently, there are no official words as to how much the device will cost, and neither has LG mentioned when exactly it will be launching the device. However, LG is saying that when the device is finally ready, the company plans to launch VR for G3 in selected markets, and that it would be bundled together with the G3 smartphone for free.



# TEAM OXYGENOS, ASSEMBLE!

OnePlus Team Officially Announced the OxygenOS



OnePlus has finally revealed the team behind the OxygenOS ROM.

OnePlus finally announced that it has chosen the team who will be building its own Android 5.0-based ROM, OxygenOS.

Before this, the most that the public has ever heard about the elusive ROM was via some leaked images of its UI, which were also debunked rather quickly by OnePlus' co-founder Carl Pei.

"OxygenOS is built with the same focus on quality and community-driven design that you've come to expect from our hardware, and the simplicity of our new logo extends to the software itself. We care about providing our users with the best experience, and we will never differentiate just for the sake of differentiation," Carl said in a statement. "We promise that any additional features will be non-obtrusive and extremely useful."

What is currently known about the OxygenOS team is

that it has more than 50 more engineers and testers, and many of the key members are also key figures behind Paranoid Android (another popular custom ROM), including Aaron Gascoine, co-founder of PA and OxygenOS technical lead; Arz Bathia, lead designer at PA and OxygenOS UI/UX designer; Carlo Savignano; Hieu Nguyen; and Jesús David Gulfo Agudelo (who are all involved in PA and are now part of OxygenOS' development team).

However, there still isn't any word regarding when OxygenOS would arrive on OnePlus devices. To that, OnePlus said that due to the various certifications needed, getting the ROM to a ready state would take the company some time. However, the ROM is now in its testing phase, and the team behind it is ensuring that it's "solid and stable" before making it available for download.

Twitter CEO Dick Costolo is taking full responsibility of abuse inflicted by Internet trolls.

## DEALING WITH TROLLS

Twitter CEO Assumes Full Responsibility for Troll Abuse

Love it or leave it, the Internet is a place in which social media has thrived and grown exponentially in an extremely short span of time. But the social media scene is not always a bed of roses, and most of the time, it's filled with people who can anonymously post comments, threats and insults that are aimed directly at specific individuals, entities or organizations. Twitter is one such place where these people linger. In fact, they have become such a menace to the social media service that many users actually wondered why they even started an account in the first place, or simply leaving it altogether.

Twitter CEO Dick Costolo is well aware of this problem, and mentioned that Twitter "sucked at dealing with abuse and trolls on the platform and

we've sucked at it for years. We lose core user after core user by not addressing simple trolling issues that they face every day."

Costolo indicated that he was willing to take full responsibility for Twitter's lackluster effort towards dealing with trolls, and ensured that the issue of trolls is going to be dealt with immediately.

"I take personal responsibility for our failure to deal with this as a company. It's nobody's fault but mine," Costolo said in the memo. "We're going to fix it, and I'm going to take full responsibility for making sure that the people working night and day on this have the resources they need to address the issue, that there are clear lines of responsibility and accountability, and that we don't equivocate in our decisions and choices."



# THE BEST PHABLET AROUND?

## Xiaomi Mi Note

### AT A GLANCE

#### OS

Android 4.4.2 Jelly Bean with MIUI 6

#### Processor

Qualcomm Snapdragon 801 quad-core 2.5GHz

#### Display

5.7-inch / 1,920 x 1,080 pixels (386 ppi)

#### Storage

16GB / 64GB

#### Dimensions

155.1 x 77.6 x 6.95 mm

#### Weight

161g

#### Price

2,299RMB (RM1,319)  
2,799RMB (RM1,606)

Xiaomi's latest phone is something of a departure from its usual fare. The 5.7-inch Mi Note phablet is a cut above the wallet-friendly offerings Xiaomi has offered in the past, and its premium design, build and specs put it in the same league as the flagship phones from Apple, Samsung and other smartphone giants. But can Xiaomi compete at the very highest levels?

The front of the Mi Note is dominated by its 5.7-inch display. Despite boasting of a larger screen size, the Mi Note actually comes out narrower and shorter than the iPhone 6 Plus.

Impressively, it also has thinner bezels, and it's about 11g lighter too. The Gorilla Glass 3 front panel is very

slightly curved at the edges, just like the iPhone 6 Plus.

The back of the device sports a '3D curved glass' rear panel, which curves at the left and right edges, somewhat like the display on the Samsung GALAXY Note Edge. In hand, it's somewhere between the blocky slab feel of the GALAXY Note 4, and the often slippery, rounded edge of the iPhone 6 Plus. In our opinion, Xiaomi has actually found the best balance between aesthetics and handling: curving just the back edges gives you a soft, ergonomic curve for your palm to wrap around, and yet still leaves a flat side edge for your hand to grip onto.

On the left side of the Mi Note, you'll find a dual-micro and nano SIM card tray.

While dual-SIM phones are nothing new, a 2-in-1 micro/nano SIM card tray is fairly novel. Both SIM card slots support TDD-LTE and FDD-LTE cellular systems, so you'll be able to use Malaysia's LTE network using either SIM card.

The Mi Note's 5.7-inch display is made by Sharp/JDI and has a Full HD 1,920 x 1,080 (386ppi) pixel resolution. The LCD panel boasts a 95 percent NTSC color gamut and a contrast ratio of 1,400:1. The screen is crisp, and pictures look fantastic, with deep contrast and vivid but not over saturated colors. If there's one complaint we have with the display, it's that viewing angles could probably be a bit better.

Audio on the Mi Note is also quite impressive. Inside, you'll





Unlike Apple's iPhone 6 camera, the Mi Note's rear camera sits flush with the back of the device.



The sides of the Mi Note taper down to about 4.5mm.

#### CONCLUSION

**A premium, flagship level phablet, and at nearly half the cost too.**

#### SPECIFICATIONS

**Display** 5.7-inch Full HD, 3D curved Gorilla Glass 3 // **Memory** 3GB RAM // **Cameras** Rear: Sony 13MP 1/2.0 camera with OIS, Front: 4MP camera with large 2-micron pixels // **Audio** Hi-Fi audio system, 24-bit/192kHz lossless playback support // **Battery** 3,000mAh Li-ion battery, Quick Charge 2.0 // **URL** [www.mi.com/en](http://www.mi.com/en)

find an ESS ES9018K2M stereo digital-to-analog converter (DAC), dual ADI ADA 4896 op-amps, dual Texas Instruments OPA1612 op-amps, and two independent 44.1kHz and 48kHz clock oscillators.

In a nutshell, all this makes the Mi Note a very capable high-res (24-bit/192kHz) audio player.

The Mi Note's 13MP rear camera uses a 1/3.06-inch Sony Exmor RS IMX214 sensor and an f/2.0 aperture. It's also armed with a Philips dual-LED warm/cold flash, and optical image stabilization. Up front, there's a 4MP camera with 2µm pixel size (the same as on HTC's UltraPixel cam), which is ideal for selfies in low light. Image quality on the Mi Note is very good, and rivals any flagship phone out there. The optical image stabilization works well, and low light shots retain detail and sharpness.

The Mi Note runs on Android 4.4 with MIUI 6 installed. MIUI 6 bears a striking resemblance to iOS 7, in terms of design, functionality and app layout. Drag down from the top of the screen and sure enough, there's a notification center with a pseudo transparent screen effect. Even specific apps like the calendar and calculator bear a striking resemblance to Apple's own.

Nevertheless, MIUI 6 actually works really well. It's fluid and responsive, and everything is easy to navigate and use. It's worth noting that unlike Xiaomi's other devices, the Mi Note doesn't offer any expandable storage, so if you can afford it, you're better off getting the 64GB version.

The Mi Note is powered by a Qualcomm Snapdragon 801 2.5GHz quad-core processor with 3GB RAM. When running a benchmark, game or other processor-intensive app the Mi Note gives you the option to switch between 'Performance' or 'Balanced' mode. In Balanced mode, performance was about what you would expect from a Snapdragon 801 device, while Performance mode impressively boosted benchmark scores up to near Snapdragon 805 levels. Battery life on the Mi Note was also fairly good, and its 3,000mAh battery lasted about 10 and a half hours on our video looping battery benchmark, making it better than the iPhone 6 Plus, but slightly worse than the GALAXY Note 4.

In the four years that Xiaomi has been in business, we've been increasingly impressed with the level of quality coming out of the Beijing-based company. Each device launched has been

better than the last, and the Mi Note certainly stands out as the culmination of Xiaomi's efforts. While the company is still guilty of being a bit too carefree when borrowing ideas or designs from competitors, the Mi Note proves that it doesn't really need that crutch anymore. The phablet's ergonomic handling, excellent display, good battery life, and superb camera prove that Xiaomi truly can compete at the very highest level.

by James Lu

TESTED & RATED

**9.0**<sub>/10</sub>

**HWM**  
MALAYSIA





# MISSION: SELFIE

## HTC Desire EYE

### AT A GLANCE

**Network**  
4G LTE

**Camera**  
13MP f/2.0 Duo Camera  
(rear) / 13MP f/2.0 (front)

**Display**  
5.2-inch Full HD Super LCD  
3 (424ppi)

**OS**  
Android 4.4.4 KitKat with  
HTC Sense 6

**Price**  
RM1,699

HTC has been experimenting with mobile photography quite a bit recently. Last year's One (M8) was touted as the world's first smartphone with a secondary camera to capture depth information. HTC called this the Duo Camera. Later in the year, they ditched their UltraPixel sensor for a 13-megapixel camera in Butterfly 2 while retaining the Duo Camera setup for much greater image quality. Their latest experiment, the Desire Eye features two 13-megapixel cameras—front and back—to cater to the selfie generation.

As more of a fun, lifestyle device, the Desire EYE is made entirely of plastic, which may

look like a budget phone at first glance. However, its matte texture offers a good grip and like the Butterfly 2, is dust- and water-resistant with the same open port design so you don't have to fumble with flaps. With an IP57 rating, it should survive being submerged up to one meter for up to 30 minutes, but HTC doesn't recommend actually using the phone underwater as it is not designed for such use.

The Desire EYE comes at a rather unconventional screen size at 5.2-inches (previous HTC models from the One (M8) to the Butterfly 2 had 5-inch screens) with a Full HD 1080p resolution. This means slightly lower pixel density though it's

hardly noticeable. We must say that it's very bright though, even when set to minimum level.

Unlike the front-facing grill-like speakers on the One (M8), the Desire EYE has slimmer and more recessed BoomSound speakers on the top and bottom of the display. It does the job significantly well with loud and crisp audio, but do take note that dust particles will begin to collect at the gaps along the display.

Software-wise, the Desire EYE is loaded with Android 4.4.4 KitKat and Sense 6. While HTC has committed to delivering Android 5.0 updates to the One (M8) and One (M7), there no official word of





Not only does the front-facing camera boast a 13-megapixel sensor, it also has its own dedicated dual-LED flash.



As a water-resistant phone, the Desire EYE is mostly sealed so access to the nano SIM and microSD slots require some effort.

#### CONCLUSION

**Sturdy and waterproof with great handling; an all-round device that'll also take high-quality selfies.**

#### SPECIFICATIONS

**Processor** 2.3GHz quad-core Qualcomm Snapdragon 801 // **Memory** 2GB RAM, 16GB storage (expandable up to 128GB via microSD) // **Connectivity** 1x 3.5mm jack, NFC, Bluetooth 4.0 with aptX, Wi-Fi a/b/g/n (2.4 & 5Ghz), NFC, DLNA, GPS+ GLONASS, microUSB 2.0, // **Battery** 2,400mAh // **Supported Media Formats** AAC, AMR, .OGG, .M4A, .MID, .MP3, .WAV, .WMA, .3GP, .3G2, .MP4, .WMV, .AVI // **SIM Type** Nano-SIM // **Dimensions** 151.7 x 73.8 x 8.5 mm (H x W x D) // **Weight** 154g // **Warranty** 1-year // **Contact** HTC Customer Service Hotline // **Telephone** 1 800 889 855 // **URL** [www.htc.com/sea](http://www.htc.com/sea)

the Desire EYE (or other HTC devices outside of the flagship One family) will get the same treatment.

So what's really new with the Desire EYE? Besides the obvious bump in megapixel count for the front-facing camera, it is the first product to ship with HTC's EYE Experience app, which consist of various camera functional. The app isn't exclusive to the Desire EYE too, and will be made available to other phones in the HTC family in the coming months, though not all features may be supported on every phone.

Tackling the more obvious functions first, the Desire EYE now has many automatic functions for taking selfies, such as smile detection, face tracking and auto selfies. You can also begin a countdown timer through voice activation by saying "Capture" or "Cheese", or shoot a video selfie with "Action". All these functions worked well and were pleasant to use.

Filters and makeup mode have become a popular function for selfie shots and the Desire EYE offers a Live Makeup mode where you can see and adjust the smoothing effect in real time before you take the shot. There's also Split Capture mode too, where you use both the front and back cameras to take a photo or video at the same time. This feature isn't exactly new as the LG Optimus G Pro and Samsung GALAXY S4 had it prior, but with it is the first phone with 13-megapixel cameras on both ends.

Speaking of which, both cameras aren't exactly the same. The rear camera features an f/2.0, 28mm wide angle lens, while the front camera has an f/2.2 and wider 22mm lens to accommodate for group selfies. Images shot with both cameras also have different processing done. Rear camera shots are more neutral with well-saturated colors, while the front camera shoots in a warmer tone. The Desire EYE can also

take better selfies in low light with dual-LED flash, which is a better implementation than LG's tactic of using the LCD screen as a source of illumination.

Battery life was pretty decent, and it lasted more than seven and a half hours in our tests. Performance and user experience is similar to previous HTC phones and in a nutshell, seems like a combination of the plastic One (E8) and the ruggedness of the Butterfly 2, with the addition of a better front camera and EYE Experience app for the selfie-focused consumer. Priced at RM1,699, the HTC Desire EYE finds itself in stiff competition with the recently available Oppo N3, which boasts a motorized 16-megapixel camera and an even larger 5.5-inch display.

by *Cookie Monster*



TESTED & RATED

**8.5**<sub>/10</sub>

**HWM**  
MALAYSIA



# MULTI-LAYERED INGENUITY

## Lenovo VIBE X2



When Lenovo made the move to enter the smartphone market, the company did so with the entrance of its first flagship – the K900 – in 2013. In essence, the phone showed a lot of potential for the company, but as time went by, the market demand changed, and the world was spoiled with mid-end and high-end smartphones that came at affordable prices. The VIBE X2 is a reflection of that growing trend, and how Lenovo doesn't want to be left out of the loop.

On paper, the VIBE X2 isn't exactly what you could call impressive or even out of the ordinary. On the surface, the hardware that comes with

the phone is actually par for the course for the majority of other smartphone brands within its class. What does make it different aesthetically, however, is the design of the phone in which Lenovo had chosen to adopt. From its side, you'll notice that the phone actually has several layers to it, mimicking the looks of one of our local desserts.

The multi-layered design, as Lenovo explained to us, actually has a reason behind it. The first one was for the phone to look and feel aesthetically pleasing to the younger generation consumers that wanted a smartphone that stands out in the crowd. The second reason was because it was designed

to support multiple add-ons and accessories, such as its own clip-on speaker, which by the way, is made in collaboration with JBL.

The phone's got a few flaws, but chief among these problems is the lack of an expandable storage option. The model for the Malaysian market has an internal storage of 32GB, but as we've mentioned time and time again, this amount of storage is already starting to seem very minimal, and the lack of an expandable storage option only makes it seem more so. That being said, the VIBE X2 does have several good traits. It's got a dual SIM card slot, a Full HD display, and it weighs in at only 120g, making it one of the lightest phones we've ever carried.

In terms of performance, we put the VIBE X2 through the usual fare of benchmarks: 3DMark, AnTuTu, Quadrant, PCMark, and Epic Citadel. For the first four tests, the phone scored 14,114, 49,745, 24,745, and 3,398. On the PCMark battery test, the phone managed to churn out a solid four hours and 48 minutes. On Epic Citadel, the phone managed to maintain an average 30 FPS on its Ultra High Quality setting.

by John Law

TESTED & RATED

**8.5**<sub>/10</sub>

**HWM**  
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Available at

**PLAZA LOW YAT**

### AT A GLANCE

#### Network

4G LTE, Dual Micro-SIM

#### Camera

13MP rear camera / 5MP wide angle front camera

#### Display

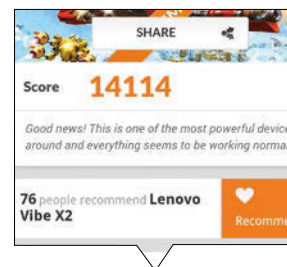
5-inch Full HD multi-touch capacitive screen

#### OS

Android KitKat 4.4

#### Price

RM1,199



It may be a midrange phone, but it's still powerful by our standards.

### CONCLUSION

**The multi-layered VIBE X2 was designed to look good, as well as to complement its clip-on accessories.**

### SPECIFICATIONS

**Processor** 2.0GHz + 1.7GHz MediaTek TRUE8CORE processor // **GPU** PowerVR G600 // **Multimedia** Audio: MP3, WAV, WMA, eAAC+ // Video: MP4, WMV, H.264 / H.263 // **Connectivity** 3.5mm audio jack, Micro-USB 2.0, dual-band Wi-Fi 802.11b/g/n, Bluetooth 4.0 // **Memory** 2GB RAM, 32GB internal storage // **Color** White, Gold, Red, Charcoal // **Dimensions** 140.2 (H) x 68.6 (W) x 7.3 (D) mm // **Weight** 120g // **Battery** 2,300mAh (Li-polymer, non-removable) // **Warranty** 1-year // **Contact** Lenovo Technology Sdn Bhd // **Telephone** (03) 7681 8000 // **URL** www.lenovo.com/my



# THE CLASSIC FEEL

## BlackBerry Classic

When BlackBerry first announced the BlackBerry Passport, it captured everyone's attention. It was different, revolutionary, and there was nothing like it. With the BlackBerry Classic, however, the company not only returned to its trademark form factor, but also resurrected certain design elements that feels out of place today.

Place the Classic in the hands of a BlackBerry veteran and you will immediately see the glow of recognition on their face. The feel, the weight, and the build quality of the Classic simply ooze BlackBerry and echoes of the premium models of the past.

To someone who is unfamiliar with BlackBerry, the Classic feels aged and rightfully

so. BlackBerry specifically designed the Classic to appeal to Bold 9900 owners, despite the existence of the newer Q10. This is because the smartphone is designed to lure BlackBerry 7 device users to upgrade to the newer BlackBerry 10 devices.

BlackBerry is so determined to make Classic appeal to Bold users that they included the signature 'Toolbelt' into the design. A relic of the past, it consists of a dedicated phone button, a BlackBerry button, a back button, and an 'end call' button. In the middle of the belt is a clickable trackpad, a relic from the days before touchscreens.

In our everyday use, we found the 'Toolbelt' to be rather useful. The trackpad

made editing text easier with its accurate cursor movement – a problem that the Passport solved using a touch keypad – while the dedicated phone button lets us make a phone call from any app. The other buttons, however, could simply be replaced with gestures or on-screen buttons, and saw no practical use.

Just like the Passport, the Classic runs on the latest BlackBerry 10.3 OS. It's capable, nimble, and it supports Android apps natively. Performance has never really been a problem with BlackBerry 10 devices. Nevertheless, we still feel that the pre-installed Amazon Appstore is limited and the home screen a little redundant. However, no other OS could beat the efficient and practical BlackBerry Hub and notification system.

When it comes to productivity and endurance, BlackBerry is still king. The battery on the Classic is rated for 22 hours and in our experience, it lasted well over an average work day with mixed usage that includes instant messaging, emails, social networking, calls, and more.

by *Azizul Rahman Ismail*



### AT A GLANCE

#### Operating System

BlackBerry OS 10.3

#### Display

3.5-inch, 294 ppi, 720 x 720 resolution, 24-bit color depth

#### Storage

16GB, expandable with microSD (up to 128GB)

#### Camera

8MP auto-focus camera, backside illumination, flash, image and video stabilization, 5-element f/2.2 lens

#### Price

RM1,588



The rubberized textured back makes the Classic feels good in the hand. The camera, on the other hand, is unremarkable.

### CONCLUSION

**A solid BlackBerry device that veteran users want, but may not be what new users need.**

### SPECIFICATIONS

**Keyboard** 35-key backlit physical QWERTY keyboard // **Processor** Qualcomm MSM8960 1.5GHz // **Memory** 2GB // **Front Facing Camera** 2MP, fixed-focus // **Dimensions** 131 x 72.4 x 10.2 mm // **Weight** 178g // **Warranty** 1-year // **Contact** Brightstar Distribution Sdn Bhd // **Telephone** 1 300 88 BRIGHT (2744) // **URL** www.blackberry.com.my

TESTED & RATED

**8.5**<sub>/10</sub>

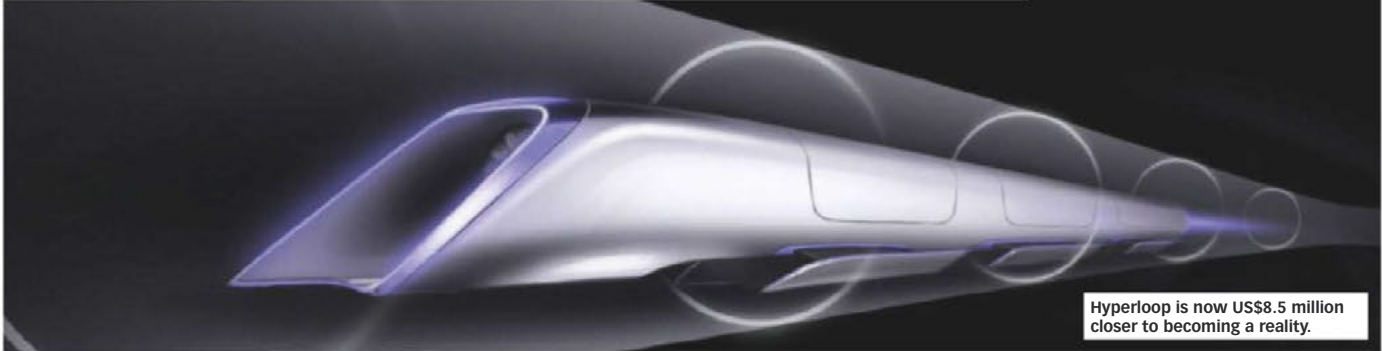
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Available at

**PLAZA LOW YAT**

# STAYING IN THE LOOP

Hyperloop Technologies Secured US\$8.5 million in Fundings



Hyperloop is now US\$8.5 million closer to becoming a reality.

Hyperloop Technologies, a company that first came into light when it went into discussion with Elon Musk, the CEO of Tesla Motors and Space X, has secured a portion of its targeted amount that is needed to make the future of transportation that was first discussed back in August 2013 a reality.

The idea behind the Hyperloop was to create a low-friction aluminum pod that will travel at a speed of 1,216km/h inside a specially designed tube. At that speed, the Hyperloop tube and train would, by scientific

calculations, be able to transport passengers from the city of Los Angeles and San Francisco in just half an hour. Furthermore, if the plan works, the Hyperloop could also change the world and become a fifth mode of modern transportation.

The group consists of Shurvin Pichevar, a major investor in Uber; Joe Lonsdale, co-founder of Palantir; Joe Messina, former White House deputy chief of staff; David Sacks, founder of Yammer; Peter Diamandis, founder of the X-Prize; and Brogan

BamBrogan, one of SpaceX's key engineers.

At present, the team has successfully pooled together and raised US\$8.5 million (approx. RM30.7 million) in funds and is looking for US\$80 million (approx. RM289.6 million) this year. However, Pichevar has already stated that he will personally fund a further US\$40 million (approximately RM144.8 million), in order to see the Hyperloop dream become that one step closer to reality.

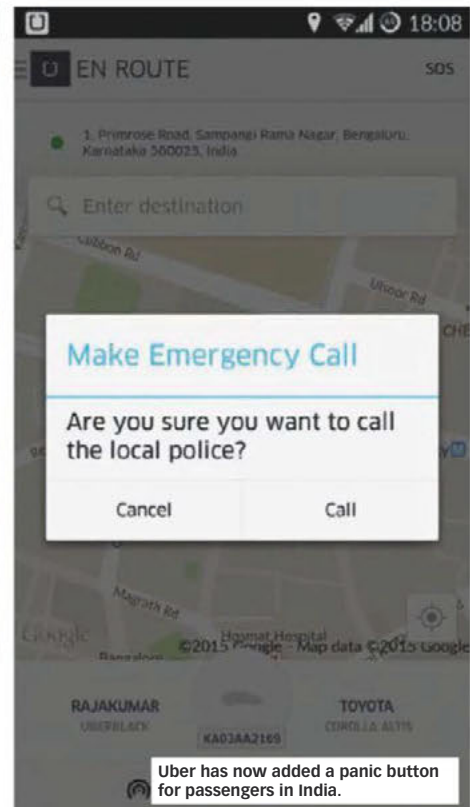
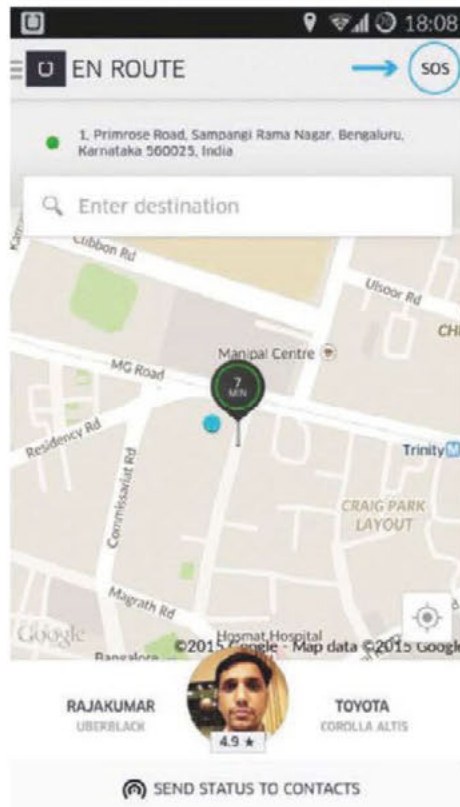
# PREVENTIVE MEASURE

Uber Adds 'Panic' Button in the Wake of Rape Incidents in India

Uber has been under the spotlight for all the wrong reasons of late. From local taxi drivers protesting its presence in their home country, to rape claims and incidents in India, the company has sobered up and is taking the initiative in dealing with the latter problem. In response to concerns about safety following the reported rape of a passenger in New Delhi, Uber said that it will be introducing two new safety features for Uber passengers in India.

The San Francisco-based taxi alternative company confirmed that it has updated the app with a new panic button feature, which will allow riders to notify the police, in the event that the passenger feels threatened by the current Uber driver. Additionally, Uber has also added another feature called 'Safety Net', which allows users to share trip details and their location to up to five people.

Other initiatives by Uber in response to the incident include creating a local team that will respond to reports by riders, who'll receive a notification from these passengers when the panic button is pressed. These new features are already available, but beyond India, Uber has yet to confirm if the new features will be available in other countries in the future.



Uber has now added a panic button for passengers in India.



# QEX

MARCH 2015 VOL 11 ISSUE 12

## FEATURE

10 NAIL-BITINGLY  
DIFFICULT GAMES  
TO CONQUER  
THIS MARCH

## REVIEWS

MSI GT80 2QE  
TITAN SLI, GRIM  
FANDANGO  
REMASTERED

TAP FOR

VIDEO



# BLOODBORNE

FACE YOUR FEARS IN THE ANCIENT CITY OF YHARNAM



# BLOOD WILL BE SPILLED

PS4-Exclusive Bloodborne to be Released on March 24, 2015

■ Sony Computer Entertainment recently announced that the PlayStation 4-exclusive title Bloodborne will be available in Asia on March 24, 2015.

You can rest assured that the game is going to be a showstopper, as Hidetaka Miyazaki, director of the critically-acclaimed Demon Souls and Dark Souls series, returned to oversee the development of Bloodborne. The action RPG is a joint venture production between developers From Software and SCE Japan Studio.

The standard edition of Bloodborne will cost RM179, but diehard fans might want to opt for the Limited Hunter Edition, which

will retail for RM229. The latter includes plenty of nifty collectibles like an artbook, a steelbook case, the game's digital soundtrack, a PlayStation 4 custom theme and even multiple costumes for your in-game character.

Don't own a PlayStation 4? No worries, a bundle pack will also be available on the day of launch at a price of RM 1,749. This bundle will also come with a 14-day trial code for PlayStation Plus, allowing you to get a glimpse of the game's online features and experience the ever-changing 'Chalice Dungeons' with friends.

If that's not enough to entice you, pre-order the game from now

until March 23 and you will be rewarded with a limited edition 'Sword-Hammer Letter Opener', while stocks last.



# GREEN WITH POWER

Razer Blade Refreshed for 2015

■ Being granted too much power is not necessarily a bad thing, especially when gaming notebooks are concerned. Razer knows that, which is why when the company refreshed the Razer Blade series, they decided to do so by packing it with even more punch.

"We continue to listen as gamer needs evolve and the new Razer Blade again sets the industry standard by which gaming laptops are measured," said Min-Liang Tan, Razer co-founder and CEO.

Judging by the specifications, it is easy to see that the new Razer Blade means business.

Power up the laptop and your eyes will be mesmerized by the Blade's 14-inch IGZO QHD+ 3,200 x 1,800 LED screen that comes complete with capacitive multi-touch, and on the inside, you will find the presence of a 2.6Ghz Intel Core i7-4720HQ processor, NVIDIA GeForce GTX 970M graphics with 3GB of VRAM, a whopping 16GB of 1,600Mhz DDR3L RAM and solid-state storage space of up to 512GB.

With prices starting at US\$2,199 (approx. RM7,800), the Razer Blade can be yours to keep when it goes on sale in March 2015 through Razer's official online store, RazerZone.com

"We continue to listen as gamer needs evolve and the new Razer Blade again sets the industry standard by which gaming laptops are measured."







Because it matters

# MONITOR FOR CHAMPIONS



Virtus.Pro, the winner of EMS One Katowice CS:GO 2014 Championship

"Thanks to BenQ for the secret weapon- XL series monitors; practicing with these spectacular monitors allowed us to deliver the best performance..." Wiktor "TAZ" Wojtas, Virtus.Pro team captain.



**XL2430T NEW**  
RM 1,699



## Gaming Champions Recommend BenQ XL Series !

BenQ XL Series, Intel Extreme Masters (IEM) official tournament monitors, is the collaboration between product developers and world-renowned gaming legends. Its 144Hz gaming refresh rate, FPS mode, Height Adjustment Stand, and Motion Blur Reduction technology highly optimize competitive gaming experiences. Practice with BenQ XL Series, you may be the next gaming champions!



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# ALL ABOARD THE HYPE TRAIN!

Overkill Software Announces New PayDay 2 DLC and Hype Train Event

Being a criminal has never been more rewarding, as PayDay2 developer Overkill Software has announced the game's latest downloadable content, the Overkill Pack, as well as a goal-based community event called 'The Hype Train'.

The DLC will entitle you to own a new minigun, three minigun mods, a rocket launcher, an escape van skin, a mask and 10 new achievements.

On the other hand, the Hype Train event that takes place between February 5 and March 12 provides PayDay 2 players a chance to contribute Hype Fuel to power the Hype Train along 10 destinations.

Each of the destinations unlock a different reward – ranging from new heists, enemies and character packs, to a full-scale PayDayCon to be held in Los Angeles

To get your share of Hype Fuel, you will need to pre-order The Overkill Pack between February 5 and March 12, by which three gallons of Hype Fuel will be yours to power the community-driven Hype Train.

The Overkill Pack will be available to purchase on Steam from March 21 for RM12.

The DLC will entitle you to own a new minigun, three minigun mods, a rocket launcher, an escape van skin, a mask and 10 new achievements.



## WORKING YOUR SIMS

The Sims 4 Gets its First Expansion Pack, Called 'Get to Work'

If managing your perpetually neurotic Sims is not already hectic enough, with the 'Get to Work' expansion pack, you are now able to physically control them whilst they are at their workplace. This was not possible with previous versions of The Sims (save for The Sims 3: Ambitions), including The Sims 4, as your Sims would be rendered (mostly) out of action the moment they stepped foot out of their home for work.

The 'Get to Work' pack also gives you the opportunity to take on three exciting new career paths: Doctor, Scientist and Detective. No longer do you have to sit idly by, while you wait



for them to get home from work, as you are now encouraged to control your Sims and their actions while they are at their respective workplaces. On top of that, you will also be able to create unique businesses such as bakeries, art galleries, and clothing boutiques, while the Build Mode gives you the flexibility to determine the items that you sell, manage your employees, and even short change a customer just for the sake of it. Other neat additions include the introduction of the Photography and Baking skills, as well as – wait for it – aliens!

The Sims 4: Get to Work will be released in April 2015 on PC and Mac for SGD49.99 (approx. RM133).





# MANIC MARCH MADNESS

There are games for boys, and then there are games for men

By Peter Chu



Video games of today have become disappointingly watered down in terms of its difficulty. They lack the unrelenting challenge that video games of old often embodied. This is especially true with first-person shooters, as there are always an abundance of health packs, checkpoints – and what is with this self-regenerating health system that most first-person shooters have adopted? So without further ado, allow us to introduce to you a selection of games that will put your attention span, patience and diligence to the test. Sweat and tears will be shed.

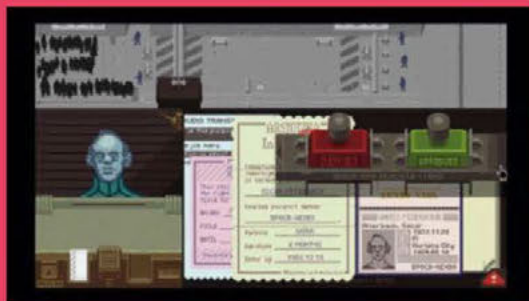




Super Hexagon



Hotline Miami



Papers, Please



Super Meat Boy



Dark Souls

## Super Hexagon

**Platform:**  
PC, Mac, Linux/GNU, iOS, Android  
**Developer:**  
Terry Cavanagh  
**RELEASE DATE:**  
2012

The premise of this BAFTA-nominated game is simple enough – control a small triangle that circles around a central hexagon and avoid the walls that are making a beeline towards you. With every 60 seconds, the speed of which the walls approach you will increase exponentially. Together with the game's mesmerizing background, you can consider yourself a legend if you can survive more than five minutes in one sitting.

## Hotline Miami

**Platform:**  
PC, Mac, Linux, PS3, PS4, PS Vita  
**Developer:**  
Dennaton Games  
**Release Date:**  
2012

Hotline Miami is a top-down shooter that emphasizes on stealth, precision and accuracy. Ignore any of the three crucial components and are you are bound to fail miserably. Miss a hit or a shot and you will meet an abrupt death as enemies are well capable of killing you within a fraction of a second upon noticing you.

## Super Meat Boy

**Platform:**  
PC, Mac, Linux, X360  
**Developer:**  
Team Meat  
**Release Date:**  
2010

When Super Meat Boy was released back in 2010, it received the Most Challenging Game award from IGN. In this platform-genre game, players are to take control of a small red cube called Meat Boy and navigate it through the plethora of lethal obstacles present in each level. Each of the 300-odd stages is relatively short, but frustratingly difficult nevertheless.

## Papers, Please

**Platform:**  
PC, Mac, Linux, PS Vita, iOS  
**Developer:**  
Lucas Pope  
**Release Date:**  
August 2013

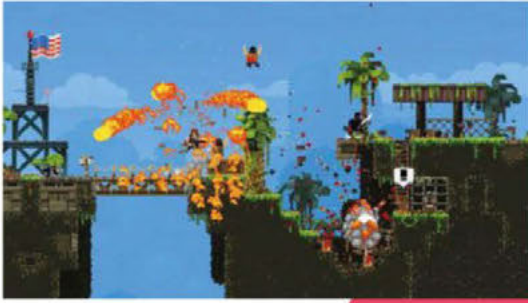
As an immigration officer in glorious Arstotzka, your job is to check a person's identification documents and see whether it tallies with other little details like passport numbers and authorization stamp designs, amongst a myriad of other stipulations. The amount of details that you will have to cross-check increases as the in-game days go by. It's like playing spot-the-difference, but a million times more troublesome.

## Dark Souls

**Platform:**  
PC, PS3, X360  
**Developer:**  
From Software  
**Release Date:**  
September 2011

It is not an exaggeration to say that all the monsters inhabiting Dark Souls' grim open-world environment are big and brutal to the extent where you will deem them overpowered. Upon death, which you will experience plenty of times, you will drop all of the in-game currency that you would have collected prior to your death and will only be given one final chance to reclaim them.





Broforce



Faster Than Light



Five Nights at Freddy's 2



Surgeon Simulator 2013



Mega Man 9

## Broforce

**Platform:**  
PC, Mac, PS4, PS Vita  
**Developer:**  
Free Lives Games  
**RELEASE DATE:**  
2014

While Broforce isn't exactly as brutally difficult as the other games on this list, its chaotic, helter-skelter-like gameplay is what earned it a mention. Broforce comes complete with a fully destructible terrain that is conveniently littered with barrels of explosives to encourage as much destruction as possible. Expect many moments of staring blankly at the screen and asking yourself, "What just happened?"

## Faster Than Light

**Platform:**  
PC, Linux, iOS, Web Browser  
**Developer:**  
Subset Games  
**Release Date:**  
2012

Always wanted to be a captain of your own spaceship? You won't be after playing Faster Than Light. Upon death, you will be required to start the game from the beginning. No second chances. The enemies that you will encounter are of random difficulty. If lady luck is on your side, your experience with Faster Than Light shouldn't be migraine inducing.

## Surgeon Simulator 2013

**Platform:**  
PC, Mac, Linux, PS4, iOS, Android  
**Developer:**  
Bossa Studios  
**Release Date:**  
2013

In Surgeon Simulator 2013, your job is to figure out a way to control a good-for-nothing hand in order to execute various delicate surgical procedures before your patient bleeds out. With surgical tools ranging from a power drill to a hand-held laser available within the reach of your butterfingers, what could possibly go wrong?

## Five Nights at Freddy's 2

**Platform:**  
PC, iOS, Android  
**Developer:**  
Scott Cawthon  
**Release Date:**  
2014

Even if you have nerves of steel, it will still be tediously difficult to pull through a night in Five Nights at Freddy's 2. Equipped with only a flashlight, a mask and several surveillance cameras to monitor your surroundings, it will not take long for you to realize that it is futile trying to fight off 10 bizarre-looking animatronic animals pouncing on you from all directions.

## Mega Man 9

**Platform:**  
PS3, X360, Wii  
**Developer:**  
Capcom  
**Release Date:**  
2008

Infamously known as the hardest Mega Man game ever, Mega Man 9 is an iconic side-scrolling platformer that demands 100 percent of your attention, 100 percent of the time. Death is swift and frequent if you're not careful, and the bosses you will face are unforgiving. Misjudge a jump by a pixel and you will often time end up in a pit of spikes.

# BUILT TO PUSH EVERY BOUNDARY

## 10 Notable Features of the New Alienware 15

The all-new Alienware 15 is a gaming notebook that is built thin without sacrificing performance, while letting you take its performance further when paired with the optional Alienware Graphics Amplifier.

### Ready to Rumble

Even without tinkering with the various hardware configurations, the base variant of the Alienware 15 – equipped with a 4th Generation Intel Core i5-4210H processor and a NVIDIA GeForce GTX 970M card no less – is still capable of handling the most demanding of games.

### Your Alienware, Your Choice

If the pre-configured specifications are not to your tastes, no worries. You are given the flexibility to customize the Alienware 15 however you see fit. Looking for a beefier processor? Sure thing. Want a speedy solid-state drive? Why not. The choice is yours.

### Otherworldly Design

It is safe to say that the Alienware 15's extraterrestrial-inspired design looks like no other gaming notebook on the market. Same goes for the material used for its chassis, which is made from aerospace-inspired carbon fiber to help minimize the bulk without sacrificing performance.

### Amplify your Games

The Alienware 15 can be paired with an optional Graphics Amplifier to help elevate your gaming experience to the next level. It can be retrofitted with desktop-class graphics cards from both AMD and NVIDIA and connecting to it is as simple as plugging it to the Alienware 15 and performing a reboot.

### Playing it Safe

Don't worry about pushing the Alienware 15 to its limits, as it comes standard with a one-year ProSupport warranty that also covers accidental damage. For a complete peace of mind, you can opt to extend it for another two years.







### **Stratospheric Performance**

All variants of the Alienware 15 are fitted with the impressive NVIDIA GeForce GTX 970M graphics as standard, but if you crave for more power, you have the option to up the ante to a formidable GeForce GTX 980M.

### **The Sound of Terror**

Savor the sounds of your opponents pleading for mercy through the Alienware 15's Klipsch-powered 2.0 speakers. Its performance is further substantiated by the presence of Creative's SoundBlaster X-Fi technology.

### **The Beauty of Destruction**

The carnage that you create during your quest for domination will be displayed in all its glory on the Alienware's Full HD (1920 x 1080) IPS display. But to really relish your path of destruction, you would want to consider upgrading the screen's resolution to 4K – just because you can.

### **Staying Cool**

Put the pedal to the metal and crank up the graphics quality of your games to the max. The CPU and GPU of the Alienware 15 will be able to take the heat just fine, as they have been outfitted with copper heatpipes and plates to enable proper cooling and heat dissipation.

### **Lighting 'em Up**

The AlienFX software allows you to configure the lights on your Alienware 15 to your heart's desire. There are 10 unique programmable zones with up to 20 distinct colors, providing over 10 trillion lighting combinations. Go ahead, knock yourself out.

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# MIGHTIEST OF THEM ALL?

## MSI GT80 2QE Titan SLI

### AT A GLANCE

#### Processor

Intel Core i7-4980HQ  
(2.8GHz, 6MB Cache)

#### Display

18.4-inch Full HD  
(1,920 x 1,080)  
Matte LED with eDP

#### Graphics

NVIDIA GeForce  
GTX 980M SLI

#### Memory

32GB

#### Storage

512GB SSD + 1TB HDD

#### Price

RM16,999



The GT80's keyboard has some of the strongest backlights we've ever seen.

### SPECIFICATIONS

**OS** Windows 8.1 **LCD Size** 18.4-inch WLED Full HD (1,920 x 1,080), Anti-glare  
**Audio** 4+1 speaker system, 7.1-channel S/PDIF output support, Audio Boost 2 technology, Creative Sound Blaster Cinema 2 **Connectivity** 1x SDXC/SDHC card reader, Killer DoubleShot Pro Gb LAN, Killer DoubleShot Pro 11ac, Bluetooth 4.1, 1x HDMI 1.4, 2x Mini-DisplayPort 1.2, 5x USB 3.0 ports **Keyboard** Single-color backlit (Red) SteelSeries keyboard **Battery** Built-in 89 Wh Li-ion **Dimension** 456 x 330 x 49 mm **Weight** 4.5kg (w/ battery) **Warranty** 2-years **Contact** MediaForte (M) Sdn Bhd **Telephone** (03) 7960 6868 **URL** my.msi.com

We never thought we'd see the day when somebody was hardcore (or crazy) enough to put a full mechanical keyboard into a notebook. We were oh so wrong.

The MSI GT80 2QE Titan SLI is the first ever notebook with a mechanical keyboard, and it's a beast. With an 18.4-inch display, the notebook isn't for the faint of heart. Not only is it large and intimidating, it's also heavy, weighing in at 4.5kg.

Not surprisingly, its hardware specs are undeniably impressive - 32GB RAM, GTX 980M SLI and four RAID 0 128GB SSDs. Unfortunately, the notebook is one of those that suffer in the display department. This isn't really the fault of MSI though as there aren't 18-inch screens that go

above 1080p at the moment, but it's sad to see the might of the GT80 relegated to just a Full HD display when it could really power a 4K screen. Of course, you could plug in a 4K monitor and do just that, but since you're buying a premium laptop, you'd expect it to contain everything.

Besides this, the first thing you'd notice is also the lack of a physical numpad. Instead, the configuration features a trackpad to the right. Look closely though and you'll realize that the numpad IS the trackpad. On the upper left of the trackpad, (where a Numlock key would be) is a toggle that allows you to between modes. We were worried that it might not be as responsive as we'd like but after using it for a while,

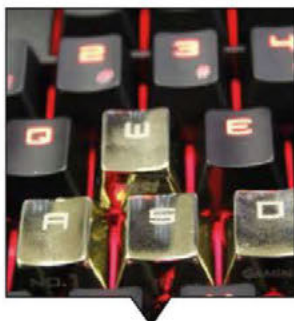
it's actually pretty good. It'd register numbers (in numpad mode) even if we pressed them in lightly and in quick succession. It's actually a nice surprise and totally unexpected.

So what is MSI asking for their mechanical gaming behemoth? RM10,999 and that's for the base model without SLI. The base model with SLI goes for RM13,999. Our fully-specced out review set will set you back a cool RM16,999.

At the moment, the main reason anybody will consider the GT80 probably is because of its keyboard. And thankfully, it's not some novelty too. MSI has managed to cram a whole TKL mechanical keyboard (Cherry MX Brown keys no less) into it. It definitely adds to its bulk, but it's an impressive machine







WASD keys come with gold key caps but they get smudged way too easily.

#### CONCLUSION

**If you have money to burn and don't mind paying a premium for a great gaming notebook, the MSI GT80 2QE Titan SLI is the machine you want.**

nonetheless. The Cherry Brown keys are perfect for gaming due to their responsiveness, and using the GT80 felt great, something we never thought we'd say about a notebook keyboard.

To that end, we actually find ourselves at an impasse. The GT80 2QE Titan SLI is a wondrous machine, and we found ourselves liking it a whole lot because of the keyboard and it has really spoiled us. I'll even go as far as to say I'd pass on the SLI and the 32GB RAM, even the i7-4980HQ processor but I can't give up the keyboard.

There is one glaring problem with the design though and we'd be remiss if we didn't point out that the GT80 doesn't have a palm rest. This is due to the trackpad being on the side. And because the notebook is as thick as it is, the drop off is quite steep. MSI does throw in a free wrist rest, but it feels like a generic one and not one that's customized for the GT80, so be warned that prolonged gaming will leave you sore.

To say our souped up review unit is extravagant is an understatement, but other

than the keyboard, it doesn't really perform any better than its peers. Yes, it is superior to just about every other single GPU notebook out there, but no significant improvements over other SLI machines like the Aftershock Titan V2.1 or **AORUS X7 Pro**. While the GT80 posted great scores in PC Mark 8 (which tested general performance), it trailed Aftershock's Titan by a fair bit in 3D Mark's Fire Strike (which tests high end notebook and desktops). Aftershock's machine posted a score of 15,891, while the GT80 scored 13,424. We figure the variance might be due to the fact that the GT80 is running slightly hotter than Aftershock's Titan. GPU-Z clocked the GT80's GPU temperature at 74 degrees, hotter than AORUS Aftershock's 72. A higher temperature might cause NVIDIA's drivers to throttle the performance a bit to cool the GPU down. Game performance was about the same though, with the GT80 averaging 113 FPS on Shadow of Mordor (Ultra settings) while the Aftershock Titan had a 109 FPS average.

We will give MSI props for integrating one of the last pieces of gaming tech - a mechanical keyboard - into a notebook, but it doesn't make monetary sense to fork out so much just for it.

If money is of no concern for you, then by all means go for The GT80. There is nothing else in the market like it at all. This is the ultimate machine for bragging rights.

For the more practical gamer, it makes more sense to go with either Aftershock or AORUS, get your own separate mechanical keyboard and still have money left over for games.

by Salehuddin Husin

TESTED & RATED

**8.0**/<sub>10</sub>

**HWM**  
MALAYSIA

# TO THE EXCELSIOR LINE

## Grim Fandango Remastered

### LIFE AFTER DEATH

More than 15 years have passed since Grim Fandango first graced PC gamers with its noir storytelling, 30's art deco environments, and a unique blend of jazz, Mexican folk and bebop score. While it was well-loved by critics, the game did not do well commercially as it was released at a time when the adventure game genre was dwindling in interest. Recent years also saw LucasArts acquired and dissolved by The Walt Disney Company, which rendered all hope of a re-release inconceivable – until now.

Thanks to the combined interest from Tim Schafer and the VPs from Disney Interactive and Sony Computer Entertainment, the rights issue was finally resolved and Grim Fandango was given the remaster treatment for fans and newcomers alike. Those who are familiar

with the 1998 original will find the gripping story, memorable characters, and occasionally obtuse puzzles intact. The pre-rendered backgrounds and cutscenes are relatively unchanged, while the characters and in-game objects sport higher resolution textures and dynamic lighting effects.

### MODERN RESTORATION

Aesthetics aside, Double Fine revisited the game's atmospheric soundtrack with a fully orchestrated score by the Melbourne Symphony Orchestra, which adds a certain flavor to the witty, charming dialog. Purists will be happy to know that the game defaults to the original 4:3 aspect ratio, with or without a fancy border. There's a 16:9 option too, but why anyone would choose to stretch out the image is beyond me. You can freely toggle between the original and remastered graphics

with the Select button during gameplay, and also switch from the tank-style controls of old (which is an Achievement by itself if you stick to it from start to end) to the new camera-relative analog controls. It's a welcome addition to be sure, but can also be tricky sometimes when navigating tight corners or the quick-changing camera angles.

Given the minimal changes in Grim Fandango Remastered, some may accuse this digital-only re-release as a lazy effort of LucasArts' timeless classic, but we see no reasons to go changing things for the sake of change. This only goes to prove that there's no need to tamper with a masterpiece. Plus, there are interesting anecdotes to be found in the optional directors' commentary and concept art gallery.

by Michael Low

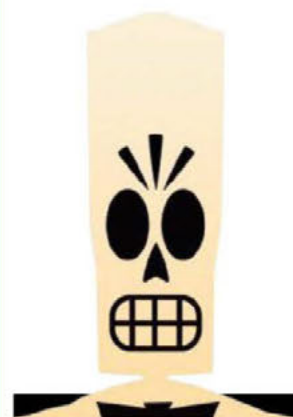
### AT A GLANCE

**Genre**  
Adventure

**Developer**  
Double Fine Productions

**Publisher**  
Double Fine Productions

**Platform**  
PC, PS4 (Tested), PS Vita



### CONCLUSION

**A wonderful remaster for everyone to experience (or rediscover) a classic LucasArts adventure.**



TESTED & RATED

**8.5**<sub>/10</sub>

**HWM**  
MALAYSIA



# aperture

March 2015 Vol 7 Issue 7

## NEWS

**Samsung NX500**  
is the company's  
second 4K-capable  
compact camera

## TEST

**FUJIFILM X30** is  
bigger, better  
and bolder

## LEARN

**Ways to discover  
your unique  
photography  
style**

## FREEDOM OF PHOTOGRAPHY OLYMPUS OM-D E-M5 MARK II



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Olympus announced OM-D E-M5 successor with the most advanced 5-axis IS system.

## 108 // NEWS

Another 4K-capable compact camera from Samsung.

## 108 // NEWS

Capture your best selfie with Sony DSC-KW11.



108 // NEWS



113 // TEST

## 110 // LEARN

Ways to discover your unique photography style.

## 112 // TEST

Is the FUJIFILM X30 better than its predecessor?

## 113 // TEST

Find out our verdict on the Polaroid C201 dashcam.



110 // LEARN



108 // NEWS



112 // TEST



## Everyone is Going for Compact

This month's edition of aperture is rather exciting as we witnessed the launch of two high-performance cameras, both of which arrive in a compact form factor. These cameras are Samsung's 4K-capable NX500 and Olympus' OM-D E-M5 Mark II, which comes with the world's most advanced 5-axis image stabilization technology. Not only that, both cameras also boast capabilities that are equivalent to high-end cameras.

In the Learn section, we also shared some tips on how you can discover your own unique photography style. As for the reviews, you can read our thoughts on the Polaroid C201 and how the FUJIFILM X30 compares to its predecessor.

For any comments or feedback, you can always head on over to [forums.hardwarezone.com.my](http://forums.hardwarezone.com.my) and share your thoughts with us.

**Ammar Uzair Aminuddin**  
HWM Malaysia

aperture uses the ASUS ProArt PA238Q monitor  
for all its image editing and viewing

**ASUS**





(From left to right) Yong Kee Nyap, General Manager, Imaging System Division, Olympus (Malaysia) Sdn Bhd; Toshiyuki Terada, Deputy General Manager, Product and Marketing Planning Department, Olympus Imaging Corporation; and Robin Wong, Assistant Product Manager, Imaging Systems Division, Olympus (Malaysia) Sdn Bhd posing with the new OM-D E-M5 Mark II.

# SMOOTH HANDHELD ACTION

Olympus OM-D E-M5 Mark II is Here in Malaysia

Back in 2012, Olympus released its first OM-D E-M5 and this year, the company finally unveiled a successor to the iconic model. The just announced E-M5 Mark II looks quite similar to its predecessor, but it offers more interesting and advanced features.

Aesthetically, the OM-D E-M5 Mark II comes with a retro-designed chassis. Although the camera looks identical to its older brother, there are a number of design changes and the most obvious is the vari-angle LCD display, which can be tilted in almost any direction, along with more customizable function buttons.

However, what's underneath the body of E-M5 Mark II is more notable and symbolize the freedom of photography, as it is equipped with the world's most advanced 5-axis image stabilization (IS) system, meaning that it has up to five shutter speed steps of shake compensation. It is also worth mentioning that the camera features a Hi-Res mode, which uses an advanced sensor-shifting technology to capture 40MP full-frame quality photos.

Apart from its excellent image credibility, the E-M5 Mark II also handles video content well, thanks to its Movie IS system that makes high-quality filmmaking much easier to achieve for amateur videographers. Videos can be recorded at Full HD resolution with choices of frame

rates up to 60 FPS. The camera does not come with a built-in flash, as it is bundled together with a tiny FL-LM3 flash, which gets its power from the camera's hot shoe.

Launched alongside the E-M5 Mark II is the weather-sealed lens, known as M.Zuiko 14-150mm f/4-5.6 lens and a firmware update for its predecessor. The camera is already available to purchase with the following configurations:

- OM-D E-M5 Mark II (body only) – **RM3,899**
- OM-D E-M5 Mark II with M.12-50mm – **RM4,499**
- OM-D E-M5 Mark II with M.14-150mm II – **RM5,599**
- OM-D E-M5 Mark II with M.12-40mm Pro – **RM6,499**



This camera is Olympus' latest pride and joy.



## 4K IN A COMPACT BODY

Samsung Brings 4K Capability to the New NX500

Following the release of its first 4K flagship camera last year, Samsung is introducing another NX series camera with similar capabilities, but in a smaller form factor, known as the NX500.

As the latest addition to Samsung's 4K mirrorless camera lineup, the NX500 is essentially a scaled-down version of the NX1, sharing many of the specifications of its predecessor. The camera uses a world's first 28MP APS-C BSI-CMOS sensor, while powered by the DRiME V image processor to deliver stunning photos with great details and minimal noise.

Yet another 'wow' factor to the NX500 is its capability to shoot continuously at up to 9 FPS, as well as capture videos in 4K resolution using the highly-efficient H.265 codec. In lieu of the electronic viewfinder of its bigger brother, the NX500 offers a tiltable 3-inch Super AMOLED display with intuitive touch controls. Photos and videos can be easily shared via built-in Wi-Fi and NFC, while a small external flash is included in the box.

The Samsung NX500 is available, starting this month, in three color variations: brown, black and white, for a suggested retail price of RM2,838, which comes bundled with a 16-55mm kit lens.



In addition to its 4K capability, the NX500 can also produce UHD-quality time-lapse videos.

## CAPTURE YOUR BEST SELFIE

Sony Cyber-Shot DSC-KW11 Self-Portrait Camera is Officially Available in MalaysiaVari-Angle LCD

With the growing craze over selfies over the recent years, camera manufacturers have taken this opportunity to introduce selfie-optimized cameras and Sony is one of the latest to unveil a self-portrait camera, known as the Cyber-shot DSC-KW11.

At first glance, this selfie camera resembles a perfume bottle; clearly designed for the ladies who predominantly take selfies. Featuring a 19.2MP Exmor R STM CMOS image sensor, the camera is also fitted with an f/2 lens, mounted on a 180-degree swivel, enabling users to shoot self-portraits and more with great details. For photo viewing, the DSC-KW11 boasts a 3.3-inch OLED touchscreen with a 1,299k-dot resolution.

Other features include a Beauty Effect mode, Flick Touch Shutter, NFC, and built-in Wi-Fi, which allows for remote shooting using compatible smart devices. The Cyber-shot DSC-KW11 is available in four colors (White, Green, Violet and Pink) at the Sony Online Store and selected outlets for RM3,299.





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# FROM AMATEUR TO HERO

Ways to discover your unique photography style.

If you look through the portfolios of any of the world-renowned photographers, one thing that will strike you the most is the uniqueness of their photos. It is common practice for photographers to discover new ways of capturing photos, new approaches and concept as these elements will lead to something that are never seen or done before. Being the photography bible to amateur photographers, we are going to share some tips regarding how to discover and develop your very own photography style.

## UNDERSTAND THE DIFFERENCE BETWEEN STYLE, SUBJECT AND GENRE

It is essential to understand the difference between these three aforementioned elements, as most amateur photographers often get confused by them. All three elements are important, but it is the style that makes the work unique. A photographer can capture images using the same set of equipments, under several subjects and genres, yet it is still the style that connects the images to a particular photographer.

Considering the subject is all about deciding what to capture. It can be as broad as landscapes, or as specific as a glass frog. Also, having an overall understanding of genres in photography is important as it will let you know where your photo resides. Example of genres in photograph include monochrome, portraiture, street, and more.



Emotion is another key element that photographer need to understand. This element is often used in photojournalism.

PHOTO CREDIT ANDREW QUILTY

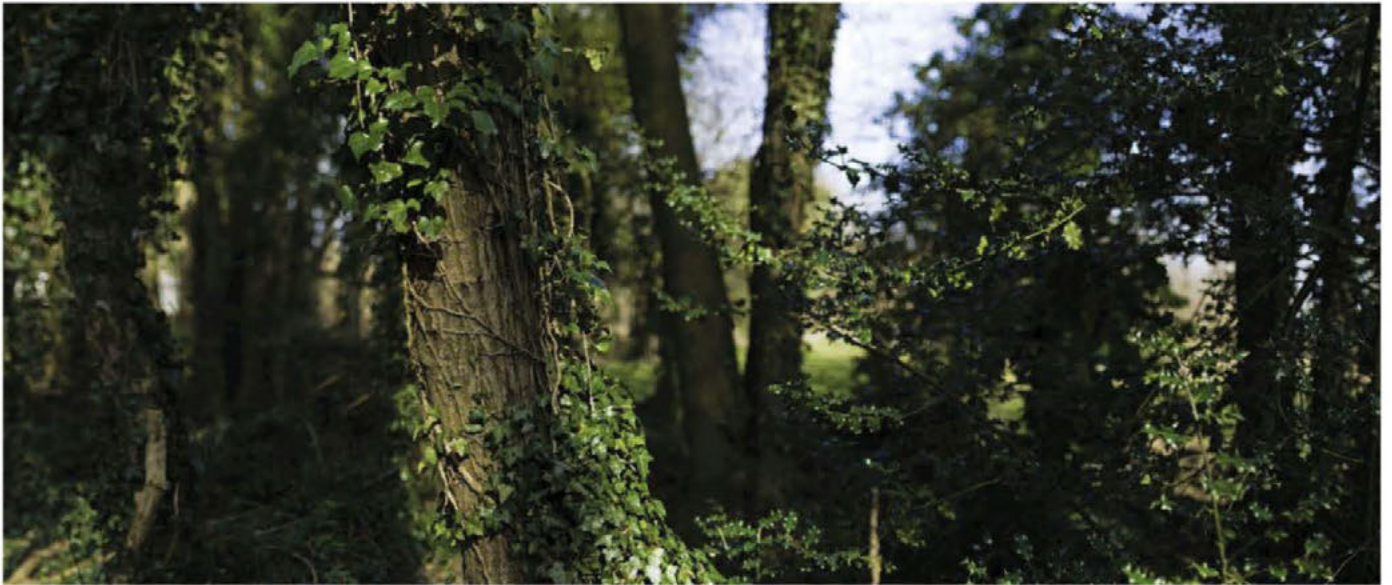




These are the two photographic techniques that were created by photographers, for photographers.

### DON'T STOP EXPLORING...

Normally, most amateur photographers will stick to one photographic style, whether they are already comfortable with it or have limited set of equipments. But that does not stop you from trying other styles as there are many resources available on the Internet. All you need to do is some research and use the camera often.



### ...AND BE WILLING TO TRY SOMETHING NEW

There are several subjects and genres made by well-known photographers over the years. Study what has been done and how they created their works. Sometimes, this may involve mimicking their work to see and understand how these photographers created their masterpieces in the first place, but it is fine as it is part of the learning process. For instance, if you happen to be in an area that has been a 'hot spot' for famous photographers, visit it and explore a different method than what the photographer captured. Perhaps, shooting the same subject with different angles or setting.

### BE CONSISTENT

Finding your own photographic style is one thing, but how to do it consistently is much more important. So, keep practicing with different equipments, subjects and genres until you find one that is most comfortable to work with. Do not be afraid to make mistakes as it helps determine what are the dos and don'ts. Once you find your style, practice it consistently as it is only way to improve your shooting style and make you stand apart from other photographers.

### CRITICIZE YOURSELF AND GET CRITICIZED

Once you're done with shooting, it's essential for a photographer to know how to look at your photos from a different perspective. Being your

own critic means stepping outside of your shoes and imagining you are that other photographer: What would you tell yourself about a specific photo? Don't be easily impressed with your photos, be critical instead and focus on the elements that make your photos unique.

Another good practice is to share your photos with your photography peers and family, as they should express their opinions in an honest manner and point out things that you wouldn't have noticed before. If there are negative comments, then learn from them and don't let them define your work, as artwork is subjective, not straightforward.

### JOIN PHOTOGRAPHY CONTESTS

Apart from gathering feedbacks from a small circle of family and friends, it is also good to seek comments from others by entering photography contests. The objective of entering such contest is not all about winning, but doubles as a platform for photographers to know the market trends in the photography industry today and the years to come. You could also observe the uniqueness of award-winning photos compared to other competitors.



# A GLORIOUS RETURN

## FUJIFILM X30

A prosumer compact camera with an integrated zoom lens isn't something that we're typically excited about, but the FUJIFILM X30 is an exception to the rule. As thrilled as we are by the announcement, its specifications and features were not like we expected. However, that's not how we measure the goods and the bads of the X30, as you'll find out in the next few paragraphs.

FUJIFILM's X series is renowned for its retro-influenced look, as well as cameras that are solidly built and glorious to look at, and the X30 continues this tradition. Available in two color variations, the X30 that we received for review is the all-black variant, complete with metal top plates and a black leatherette that covers most of the chassis. The camera body feels solid in our hands, but it's not something that you can fit into your pocket, due to its weight and form factor. Like the previous X20, it sports the same 12MP X-Trans CMOS II image sensor and FUJINON manual zoom lens.

At first glance, there's nothing out of the ordinary in terms of its aesthetics, but the control scheme has been improved. There's now a control ring around the lens, along with a button that changes its function (white balance, ISO, shooting mode, film simulation), as well as a switch to toggle between single AF, continuous AF and manual focus. We also found the X30 to provide better, clearer images with great amount details and optimal brightness.

Other new features on the X30 that are absent in the X20 include the 920k-dot tilted LCD display, interval shooting function, customizable Q button, Classic Chrome film simulation and a stellar battery life that can capture up to 470 photos per charge. Thanks to built-in Wi-Fi, the X30 enables users to transfer photos, as well as shoot remotely via FUJIFILM's proprietary app.

As for performance, we took it out of the labs to see how it performs in daylight condition. The result was simply amazing as the camera's white balance

system handled natural lighting in stride to produce natural-looking photos. The X30 also handled chromatic aberration fairly well, and its overall image quality was on par with its predecessor due to the presence of the same sensor.

Then, we brought it back to the lab for our standard ISO test. The ISO performance of this camera shined through from ISO 100 to ISO 800. The smudging of details became apparent when it reaches ISO 6400 and above. If we shoot in RAW, the noise level is still acceptable, going so far as to give the photo a certain quality in some instances.

by Ammar Uzair Aminuddin

TESTED & RATED

8.5/10

HWM  
MALAYSIA

Available at

PLAZA LOW YAT



### AT A GLANCE

**Image Sensor**  
APS-C X-Trans CMOS II

**Megapixels**  
12.0MP (effective)

**Dimensions**  
118.7 x 71.6 x 60.3 mm

**Weight**  
423g (incl. battery and memory card)

**Price**  
RM2,288



The LX100 delivers sharp details at ISO 200 (top), with minor detail loss at ISO 3200 (bottom).

### CONCLUSION

Overall, the X30 is a well-built compact camera for basic and advanced users by giving them more controls to capture great photos.

### SPECIFICATIONS

**Lens** 28 – 112mm // **ISO Rating** ISO 100 – ISO 12800 // **Aperture Range** f/2.0 – f/11 (Wide), f/2.8 – f/11 (Telephoto) // **Storage Type** SD/SDHC/SDXC (UHS-I) // **Warranty** 1-year // **Contact** FUJIFILM (Malaysia) Sdn Bhd // **Telephone** (03) 5569 8388 // **URL** www.fujifilm.com.my





# AUTOMOTIVE BLACK BOX

**Polaroid C201**

We trust that most of you have come across a dashboard camera or two, as many Malaysians drivers today have these ubiquitous devices installed in their vehicles. As an automotive black box, it's designed to capture and record the driving experience, from road rage to anything that can possibly happen in the road ahead, at a predetermined angle. One brand that we didn't expect to find is Polaroid, who came out with the C201 Car Recorder for this very purpose.

In terms of aesthetics, the dashcam itself is rather small and slim – making it unobtrusive when concealed in the dashboard area. Pointing out to the road is a small, fixed-focus 120-degree wide angle lens that is capable of capturing Full HD video at 30 FPS, and there's a 2-inch LCD display facing towards the driver's seat. All the buttons can be found beside the display

panel, while the expandable microSD slot, is located just underneath the display. On one end of the device is the Mini-USB port to connect to the included in-car power adapter.

Apart from recording Full HD video footage, the C201 also has the ability to do loop-cycle recording, which means it will overwrite the oldest footage with the newest ones once the storage is full. Not only that, users will have the option to record at lower resolution and without audio to save storage space. The C201 is also equipped with G-Sensor that detects sudden movement and automatically triggers a recording at the same time. This is crucial for situations where the risk of collision is imminent.

To test its performance, we mounted the C201 on a vehicle's interior windshield surface using a suction cup and cruised along the road

with it. The recorded footage was great, as the license plate details from passing cars are discernible, while the seamless contrast adjustment is a very welcome feature. However, we noticed some of the darker areas were lacking in detail at times. In most use cases, the C201 does a commendable job, and it can even serve as a camera for snapping street photos, if you so desire.

by *Ammar Uzair Aminuddin*

TESTED & RATED

**8.0**<sub>/10</sub>

**HWM**  
MALAYSIA

## AT A GLANCE

**Type**  
Dashcam

**Megapixels**  
2MP

**Dimensions**  
67.5 x 51 x 31 mm

**Weight**  
52g

**Price**  
RM399



The Polaroid C201 comes with a minimalist and user-friendly UI.

## CONCLUSION

**A slim and compact automotive 'black box' that watches the road without distracting the driver.**

## SPECIFICATIONS

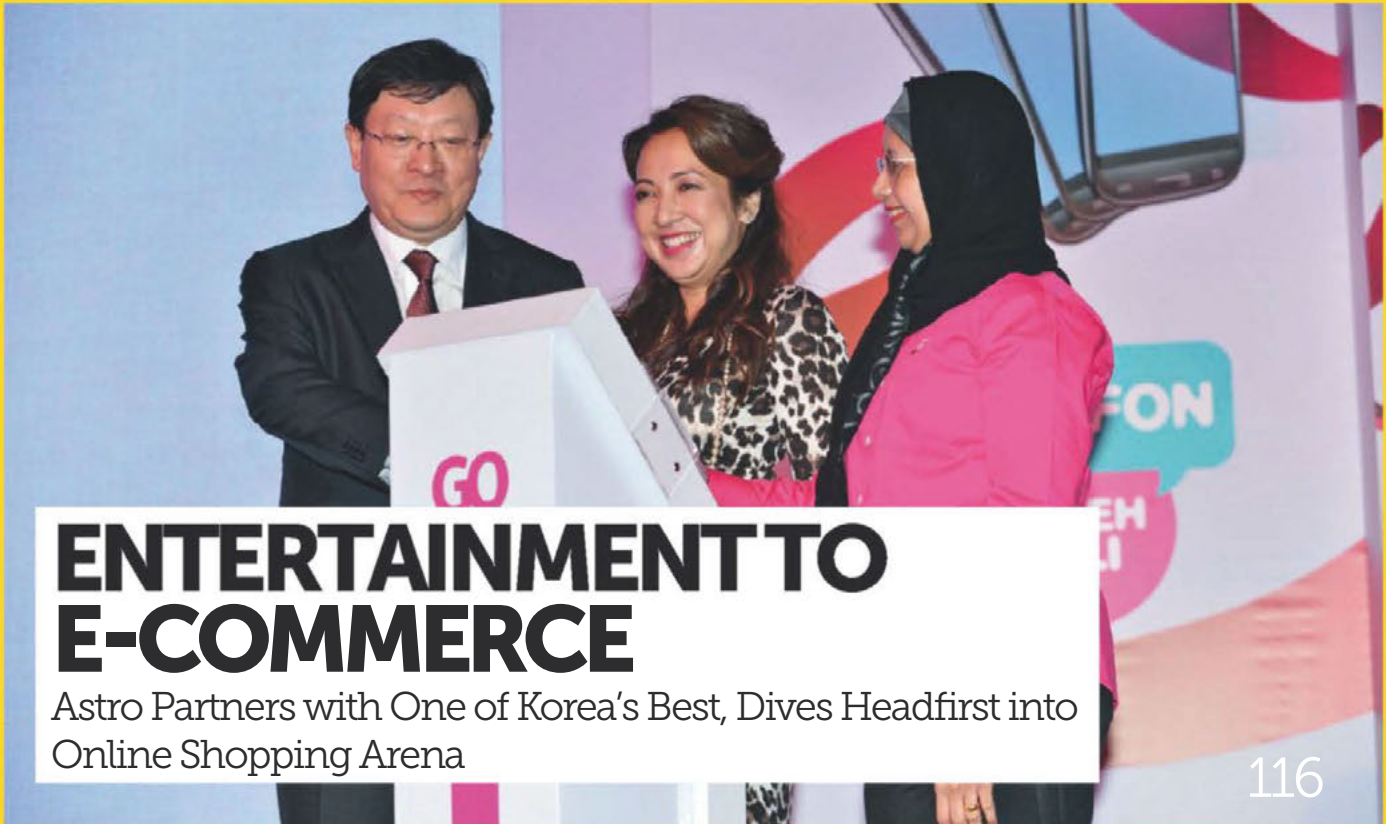
**Power Source** Rechargeable battery, in-car charger // **Format** AVI and JPEG // **Microphone** Built-in // **Storage** microSD (up to 32GB) // **Warranty** 1-year // **Contact** SC Distribution Sdn Bhd // **Telephone** (03) 4296 2628 // **URL** [www.polaroid.com](http://www.polaroid.com)

Available at

**PLAZA LOW YAT**

# SMB

THE SMALL MEDIUM BUSINESS SECTION



## ENTERTAINMENT TO E-COMMERCE

Astro Partners with One of Korea's Best, Dives Headfirst into Online Shopping Arena

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### AZIZUL RAHMAN ISMAIL

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Getting ahead in business is all about getting the information you need, when you need it, and Azizul knows this well. He digests business related technology, events, news, and products to give you only what you need to drive your small and medium-sized business ahead of the pack.



### INSIDE

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#### REPORT

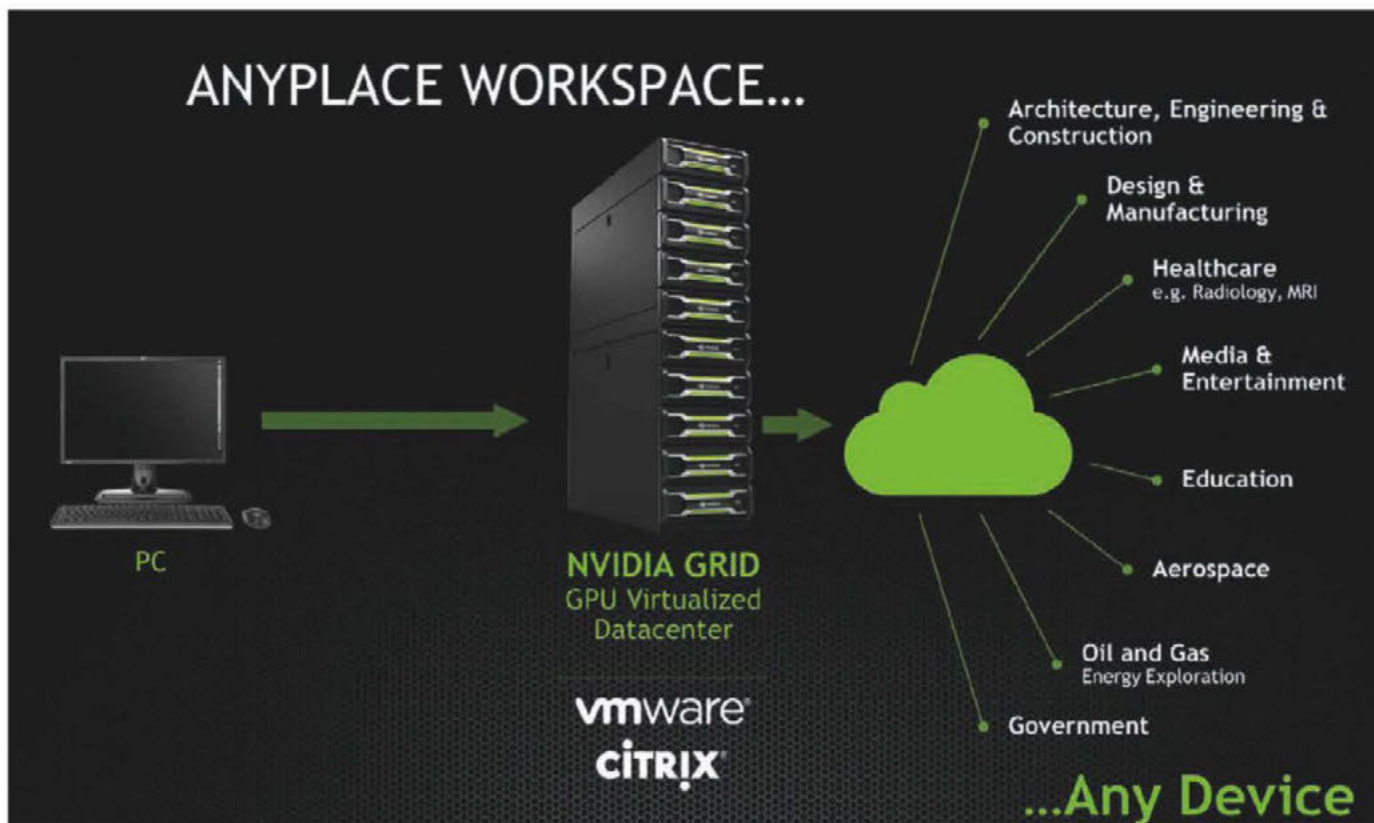
Coverage of business events in and out of the country



120

The dynamic WD Sentinel DS5100





NVIDIA and VMware are now working hand in hand.

# JOINING CPU AND GPU POWER

## NVIDIA and VMware Are Teaming Up in the VDI Space

NVIDIA officially teamed up with one of the world's popular cloud and virtualization software provider, VMware, in order to enhance the experience for users on both NVIDIA GRID and VMware's Horizon and vSphere.

NVIDIA's GRID servers are the graphics company's own virtualized GPU datacenter, which are designed for clients, companies, and individuals who are looking for powerful workstation apps that can be accessed from anywhere and at anytime – without the need of a physical or powerful desktop to run the programs. Once the client logs on to the GRID, the client then gains remote access to their work and apps, provided that they have a steady connection to the Internet whenever they are. Unlike most cloud and virtual desktop providers, NVIDIA's GRID is unique in that their servers are built upon their specialty, which is their GPU power, instead of the traditional CPU power.

VMware functions in pretty much the same manner as NVIDIA's GRID, save except that the company's system operates on the aforementioned traditional CPU power. More specifically, where NVIDIA's GRID allows its clients to facilitate consumers in fields such as automobile design, power usage, knowledge applications, and digital field tasks, VMware's services are more enterprise oriented. VMware also has its own cloud and virtualization software, which are the Horizon and vSphere Hypervisor.

With this new partnership, both companies can now benefit from each other in more ways than one. With NVIDIA's vGPU technology, VMware will now be able to provide their clients with a more dynamic and



powerful virtual desktop experience across the Horizon and vSphere user space. On the other hand, NVIDIA will now have access to a much wider field of clients in the enterprise sector.

If you're interested in what both these companies have to offer, you may also head over to NVIDIA's website to find out more about the two companies, and how it may be applied to your business via the Direct Access Program. Current VMware Horizon and vSphere clients are also encouraged to apply for the program in order to find out the full details.

# 11STREET DEBUTS

Korea's Largest Online Marketplace to Make Malaysian Debut in April, Expected to Bring 11,000 Sellers Onboard

11street will soon open a Malaysian version of its popular online marketplace and is now ready for seller registration. Established in Korea since 2008, it is one of the top global ecommerce marketplaces, with presence in Turkey and Indonesia.

As of now, 11street has 22 million sellers serving over 40 million consumers worldwide, with annual gross merchandise value of US\$6 billion (approximately RM19.8 billion). Hoseok Kim, CEO of 11street in Malaysia, said that the Malaysian version of 11street is scheduled to be launched to consumers in April 2015.

"We wish to foster continued ecommerce growth and elevate the maturity of the industry by empowering more local offline businesses particularly SMBs to break-through the traditional business model and explore the numerous ecommerce opportunities in the online space."

"More than 35 million Malaysian Ringgit (US\$10 million) will be invested this year in various seller development programs, marketing and promotions to bring local sellers onboard and at the same time, to attract buyers to visit 11street in order to accelerate our online sellers' reach to consumers," said Kim.

The 11street seller office is now open for registration, offering exclusive commercial benefits such as no store fee, 50 percent discount on transaction fee, complimentary use of Seller Zone facilities, promotion credits, and product listing coupons, will be given as part of the early-bird promotion package for new sellers who register before April 2015.



Hoseok Kim, CEO of 11street, Malaysia.

# ASTRO GO SHOP

Consumer Media Entertainment Group Dips Toes into Ecommerce

Astro Malaysia Holdings Berhad (Astro) will partner with GS Home Shopping Inc., a Korean multimedia retailer to launch GO SHOP, a new 24-hour shopping service on Astro TV (Channel 118), Astro On The Go, as well as via GO SHOP's online and mobile platforms.

"Malaysians are increasingly connected, savvy and informed, demanding only the very best hence, this signals our commitment to serve our customers even better by bringing all Malaysians even more choice, convenience and experience. It also allows us to diversify our business and tap into a growing global industry that is projected to be worth RM3.6 billion in Malaysia by 2020 with online shopping on a rising trend," said Astro CEO Datuk Rohana Rozhan.

GO SHOP will target the readily addressable market of 4.3 million homes and 17 million

consumers. Its multiplatform reach aims to cater to Malaysians looking for an entertaining, enjoyable and convenient shopping experience.

"Our commitment in pursuit of providing our customers only the global best, is to build an end-to-end best-in-class experience in ecommerce, from a home shopping channel, to Astro On The Go, online and mobile platforms to the right products, the right pricing, and the right supply chain logistics, as well as an enabling Astro Payment Gateway that facilitates multiple payment options including debit and credit cards, online bank transfers and Easy Payment plans," added Rohana.

Since its soft launch on November 1 last year, GO SHOP has had over 115,000 products orders. Currently, 60 products are available, with plans to double the number within a year.



Datuk Rozalila Abdul Rahman, CEO, GO SHOP.

## APPOINTMENTS

### Lenovo Names New Head of Asia-Pacific Region

As part of its plans to reunite the Asia-Pacific Emerging Markets (APEM) and Asia-Pacific Mature Markets (APMM) businesses into a single unit, Lenovo recently appointed Roderick Lappin as president of Lenovo's Asia-Pacific region.

Currently based in Japan, Lappin intends to stay in Tokyo where he will run the Asia-Pacific business and remains as the president of NEC Lenovo Japan Group. He will also continue to lead the Japan and ANZ business and will report to Gianfranco Lanci, Lenovo's chief operating officer and executive senior vice president.

"Asia-Pacific presents Lenovo with a swath of opportunities and is critical for our continued success as the global leader in PCs, and I'm excited to be taking over a new amalgamated team brimming with talented people, many of whom I have worked with personally. I have set my sights to not only continue Lenovo's momentum in the PC market, but to elevate our positions in other key categories including mobile and other consumer computing devices across Asia-Pacific. I know for certain that together, with my new team, we can make this happen," said Lappin.



Lenovo Asia-Pacific Region President, Roderick Lappin.



# SUBSCRIPTION TRANSITION

From Next Year Onwards, Autodesk Software Will Only be Available on a Subscription Basis

Autodesk announced that it is going to adopt a subscription model for most of its standalone desktop software products. From February 1, 2016, these products will only be available via Desktop Subscription.

These changes will also provide customers with a simplified product management and deployment experience, and makes it easier to introduce new tools and technology into the workflow with lower upfront cost and the ability to pay as you go.

"How the world is designed and made is changing, and how software is delivered is changing as well. The companies that embrace these changes will lead their industries toward a more nimble, connected and richer future. Our customers have long asked for greater flexibility and more value from their software investments. The shift to subscription allows Autodesk to deliver both, as well as an improved user

experience and easier access to a broader portfolio of technology," said Andrew Anagnost, Senior Vice President, Industry Strategy & Marketing, Autodesk, Inc.

Autodesk customers who have purchased perpetual licenses prior to February 1, 2016 will be able to continue to use those licenses, and customers on Maintenance Subscription will continue to receive corresponding benefits for as long as their subscription remains active. Autodesk will also continue to offer Cloud Services Subscriptions.

For new subscribers, Autodesk Desktop Subscription offers a simplified installation, management and upgrade experience, flexible payment terms, and broader access rights across multiple devices. Autodesk also plans to continually innovate and improve Desktop Subscription products to tightly integrate them with Autodesk cloud services and reduce file compatibility issues.



## AVNET PARTNERS EMC

Partnership Aims to Capitalize on the High-Growth Flash Storage Market, Allows Avnet Malaysia to Expand its Distribution of EMC's Storage Offerings

Avnet Technology Solutions announced a new partnership with EMC Computer Systems (Malaysia) Sdn Bhd to meet the demand for flash storage that is driven by a widespread urgency to harness Big Data.

"Avnet's alliance with EMC aligns with our business strategy to seize the immediate business opportunities arising from demand for flash-based storage platforms, especially among government sectors, enterprises and mid commercial markets," said Avnet Malaysia's general manager, Chiew Yue Lam.

EMC Malaysia's managing director, Cheam Tat Inn added that the company is expanding its partner ecosystem to ensure that customers, both current and potential, get the winning combination of niche skills and technologies in order to harness the potential of Big Data. He also said that Avnet was a natural choice in this mission as they share EMC's enthusiasm and focus on delivering best-in-class flash technologies to customers.

There is huge growth potential for the growth of the flash storage market here in Malaysia. Flash is one of the hottest segments in the storage market today, driven by an increase in online content, and amount of data generated by mobile connected devices, which is set to reach 27 percent in 2020 from 17 percent in 2013. Additionally, IDC forecasts future growth in this market to soar to US\$1.6 billion by 2016.



(From left to right) Cheam Tat Inn, managing director of EMC Malaysia, and Chiew Yue Lam, Avnet Malaysia's general manager.

# IOT, CONNECTED

Cisco Connected Safe and Security Solutions Automate and Simplify Business Operations, and More

■ Cisco recently announced the Connected Safety and Security solutions. The goal is to remedy challenges of managing, securing and safeguarding assets, such as people, property, and things in remote sites, while at the same time leverage the new capabilities and benefits of the Internet of Things (IoT).

At the core of these new solutions is Cisco's Video Surveillance Manager 7.6 (VSM), a proven, mature, and scalable IoT video surveillance platform that enables customers to manage highly distributed multivendor, edge-based analytics applications.

The solution now provides new IP Camera application management features that, together with video analytics, connected edge storage, and IoT connectivity, can solve a broad range of safety and security challenges for public

sector, energy, transportation, industrial, and service provider customer by delivering reliability at scale.

"Crime and safety tops the list of the daily concerns of ordinary Malaysians. Deployment of enforcement personnel to patrol crime hotspot areas, especially if they are scattered, can be a challenge as these agencies face the problem of limited resources. That is why we see the Malaysian Government increasingly relying on innovative solutions such as the Safe City Program through the Government



Albert Chai, country manager for Cisco in Malaysia

Transformation Program (GTP) that was built on the Crime Prevention through Environmental Design (CPTED) principles to reduce street crime levels and making citizens feel safer," said Cisco Malaysia's country manager, Albert Chai.

Meanwhile, Cisco also announced support for Cisco Instant Connect mobile apps on iOS devices, in addition to Android devices.

## CREST GOES IOT

First Industry-Led Internet of Things Cloud Data Center and Research Laboratory Opens in Malaysia



(From left to right) Jaffri Ibrahim (CEO-CREST), Tengku Dato' Sri Azmil Zaharuddin (Executive Director – Khazanah Nasional), Dr. Khoh Soo Beng (Research & Program Director – CREST), Thomas Ooi (Marketing Manager – Intel), Au Yong Ken Leong (Systems Engineer, Cisco) and Chris Kelly (General Manager – Malaysia Design Centre, Intel).

■ Collaborative Research in Engineering, Science and Technology (CREST) recently announced the establishment of the CREST Internet of Things (IoT) Cloud Data Center and Research Laboratory (ICDC Research Lab) in Penang in collaboration with Cisco, Dell, IBM, Intel, Kontron and Universiti Sains Malaysia (USM).

The ICDC Research Lab, which is located at CREST Place in sains@usm in Bukit Jambul, aims to provide Malaysian companies, the government, and academia with opportunities to design, develop and commercialize IoT products and solutions. It does this by enabling individuals and organizations to collaborate and access IoT-related knowledge and know-how through research and development (R&D) activities.

Initiatives at the ICDC Research Lab will include hackathons and invention challenges, such as the Telemedicine Innovation Challenge to be held in conjunction with the 1st Malaysia Telemedicine Conference in August 2015, and other R&D projects on IoT.

Currently, the research lab is being utilized for a telematics pilot project involving 50 USM fleet cars and busses. Jointly undertaken by CREST, Intel, and USM, the pilot project is a telematics solution that focuses on vehicle safety and driving behavior analytics. The project also serves to validate and verify the equipment operation of the ICDC Research Lab and discover potentials challenges that may arise during the course of the project.



# WIRELESS LAN COVERAGE

Fortinet FortiAP Wireless Access Point is Designed to Deliver Secure Broadband for Retailers

Fortinet released seven new FortiAP Wireless LAN Access Points engineered to deliver expansive wireless LAN coverage to retailers, branch offices, and distributed enterprises.

"The launch of the new FortiAP Wireless LAN Access Points further bolsters

Fortinet's industry-leading portfolio of hyper-secure solutions tailored for distributed enterprises. Fortinet's solutions go a step further than the competition, providing advanced services like FortiGuard real-time threat research and intelligence, streamlining complex networking infrastructures to ensure no downtime or interference with existing applications, and enabling deep analytics that make an organization's distributed network a competitive asset that delivers greater profitability," said Fortinet Malaysia's country manager, Michelle Ong.

These wireless access points support dual and triple stream MIMO 802.11ac and are designed to work with applications that demand security, such as Point-of-Sale (POS) and inventory systems for retail, connected medical equipment and physician kiosks for healthcare, or simply deliver robust BYOD.

As part of Fortinet's broad Connect and Secure solution, FortiAP



The Fortinet FortiAP 25D.

Wireless LAN Access Points integrate with Fortinet's FortiGate Next Generation Firewall (NGFW) and Unified Threat Management (UTM) products. This allows distributed organizations to better adhere to compliance regulations and analyze customer behavior to compete more effectively in the marketplace.

FortiAPs can also be paired with Fortinet's FortiPresence Analytics solution, which delivers customer presence analytics to power the brick-and-mortar retail stores of the future. FortiPresence enables FortiAPs to function as a sensor that can analyze the location of foot traffic, distinguish between new or repeat visitors, provide historical and real-time data analysis, and much more. Enabling innovative marketing engagement initiatives like social Wi-Fi access and smart digital signage, FortiPresence paired with FortiAPs enable retailers to optimize their businesses for the digital age.

# NATIONAL BDA INNOVATION NETWORK

Big Data Analytics Experts from the Public and Private Sectors Collaborate to Play a Significant Role in Malaysia's Economy

The Multimedia Development Corporation (MDeC) recently launched the National Big Data Analytics (BDA) Innovation Network to accelerate the adoption of BDA in Malaysia. The establishment of this Innovation Network is said to be a step in the direction of making Malaysia a BDA hub in the ASEAN region.

The launch was marked with three Memorandums of Understanding (MoUs) with leading industry and key government partners to establish a network of BDA Innovation Centers of Excellence (COE).

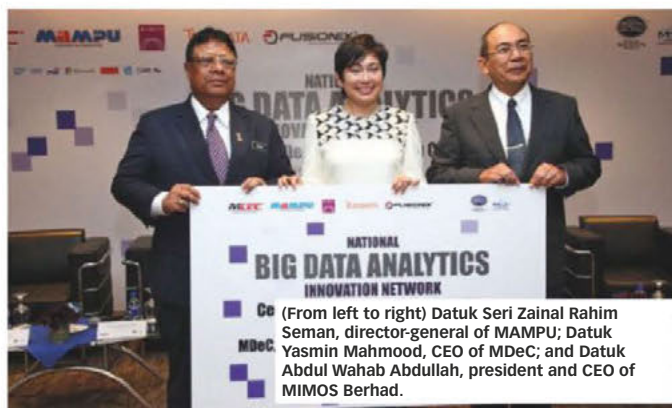
A total of about 50 data science professionals, including 15 data scientists, will be involved in the National BDA COEs. They will be working on several high-impact projects, such as dengue prediction and prevention, fighting organized crime and drug trafficking, as well as reducing the country's tax gap by pinpointing tax frauds through

predictive analytics.

It is hoped that the effort will lead to the proliferation of BDA technologies in these key industries that would generate various job opportunities in the respective sectors, and thus create a sustainable ecosystem in Malaysia as a catalyst for further economic growth.

"The National BDA Innovation Network showcases MDeC leading the effort by drawing upon our competencies in national BDA thought-leadership. Indeed, no single player can drive the adoption of technology trends in Malaysia, thus public and private partnership is essential in accelerating the adoption of BDA on a national scale," said MDeC CEO Datuk Yasmin Mahmood.

The setting up of National BDA COEs was one of the three imperatives announced by the Prime Minister Datuk Sri Mohd Najib Tun Abdul Razak during the 26th MSC Malaysia Implementation Council Meeting (ICM) held in October 2014.



## AT A GLANCE

**Operating System**

Windows Server 2012 R2 Essentials

**CPU**

Intel Xeon E3-1220L v2 2.3GHz Dual Core Processor

**RAM**

8GB

**Data Protection**

Storage Spaces or Hardware RAID (JBOD, 0, 1, 5, 10)

**Price**

RM12,999



Although it has ample ports, we wish the DS5100 has an HDMI port instead. The cooling fan can get loud as well.

## CONCLUSION

**The NAS and server system that SMBs looking to grow in the future should keep an eye on.**

## SPECIFICATIONS

**Cloud Integration** Windows Azure, Office 365 // **Network protocols** CIFS/SMB, NFS, HTTP, HTTPS, FTP, WebDAV, Bonjour // **Boot Drive** One 2.5-inch, pre-installed with OS (optional slot for a second boot drive) // **Interface** 2x Gigabit Ethernet, 4x USB 3.0, 2x USB 2.0, VGA // **Capacity** 8TB // **Dimensions** 205.7 x 223.5 x 170.0 mm // **Warranty** 1-year // **Contact** Amble Action Sdn Bhd // **Telephone** (03) 7968 6899 // **URL** www.wdc.com

# ULTRA-COMPACT NETWORK SERVER

WD Sentinel DS5100

For some small businesses, a network attached storage is enough. A modern NAS does more than just store data in a centralized location, it also offers accessibility from anywhere and on any device, as well as services to make life that much easier. Here, we take a look at the WD Sentinel DS5100, the NAS server for the SMB that is prepared to go beyond the ordinary.

The WD Sentinel DS5100 is a four-bay NAS that runs on Windows Server 2012 R2 Essentials, which is licensed and optimized for 25 users and 50 Windows or Mac computers. In other words, the DS5100 is an ultra-compact centralized storage that's also capable of acting as the first server or

primary domain controller in a SMB setting. Its combination of dual-core 2.3GHz Intel Xeon processor and 8GB ECC RAM enables SMBs to run line-of-business applications reliably without compromising on NAS performance.

As complex and powerful as the DS5100 is, we found that it was a breeze to set up, but it will take a while to get it up and running. You will also need a keyboard, mouse, and a VGA-compatible monitor though. We wished it was fitted with an HDMI port instead.

For a person who isn't used to Windows Server, it may appear to be very daunting to perform tasks like setting up the data volumes. WD could improve this with a wizard

that simplifies and directs setup towards a RAID-5 setup. Similarly, the Essentials version misses out on the ability to run the Exchange Server and the main file, web, or application server functions in one box, which may put a limit on its use as the dream 'business-in-a-box' server.

On the other hand, businesses gain enterprise-class reliability with dual Gigabit Ethernet ports, and dual external DC-in power adapter ports. This engineered redundancy, along with a bezel lock for physical security, all add to the reliability of this ultra-compact network storage plus server that can be deployed virtually anywhere.

by Azizul Rahman Ismail



TESTED &amp; RATED

8.5/10

HWM  
MALAYSIA



LEARN

# THE PLAYSTATION SECOND SCREEN EXPERIENCE

■ The PS4 is a great gaming system, especially with recent updates. Remote Play is fully up and running, as are its second screen experiences. It sounds great, but getting them set up and working can be a major headache. Luckily, we're here to set the record straight on what you need to do.

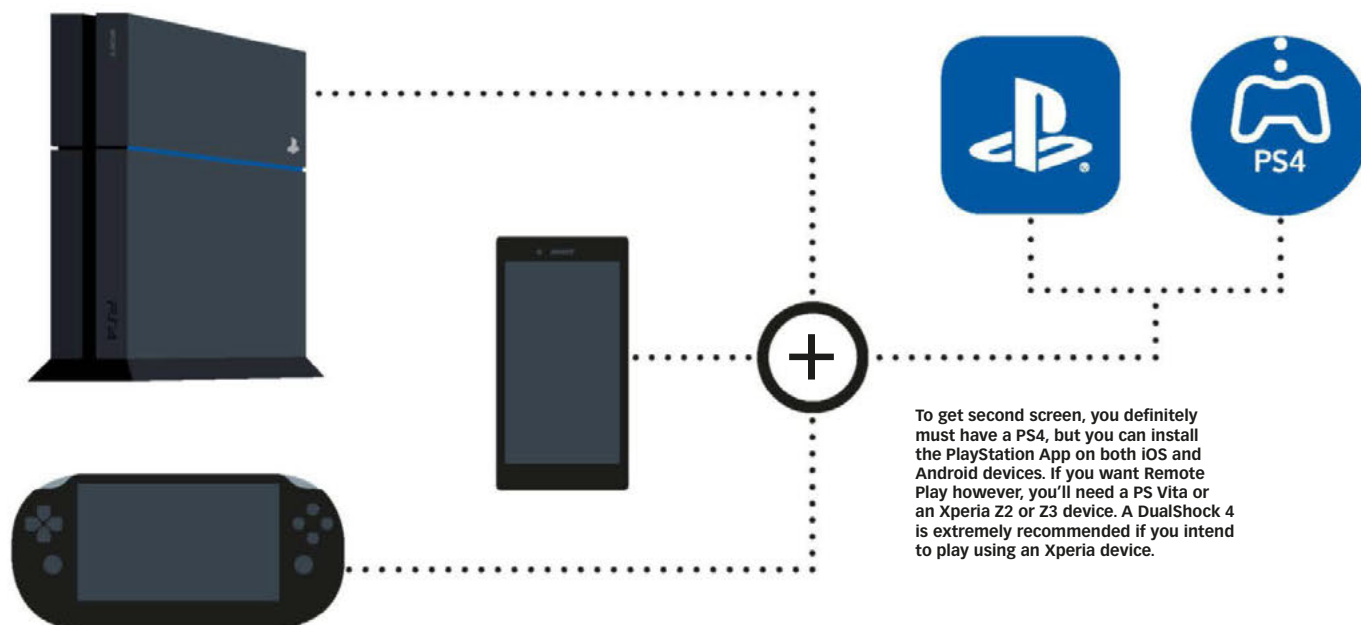
Text by *Salehuddin Husin*  
Art Direction by *Ian Chong*

## MORE INSIDE >

- PORTING ITUNES LIBRARY
- ESSENTIAL GAMING COMPANIONS

PHOTOGRAPHY BY DARREN CHANG

# WHAT YOU'LL NEED:



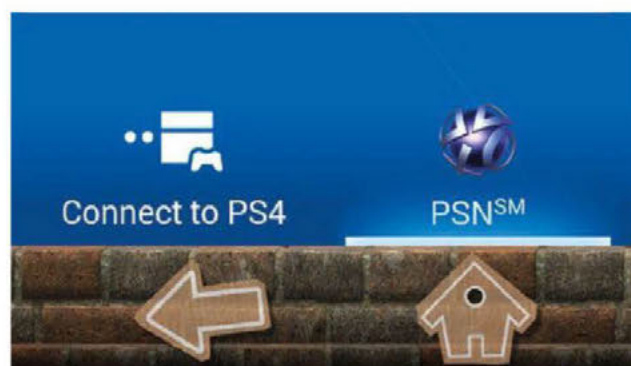
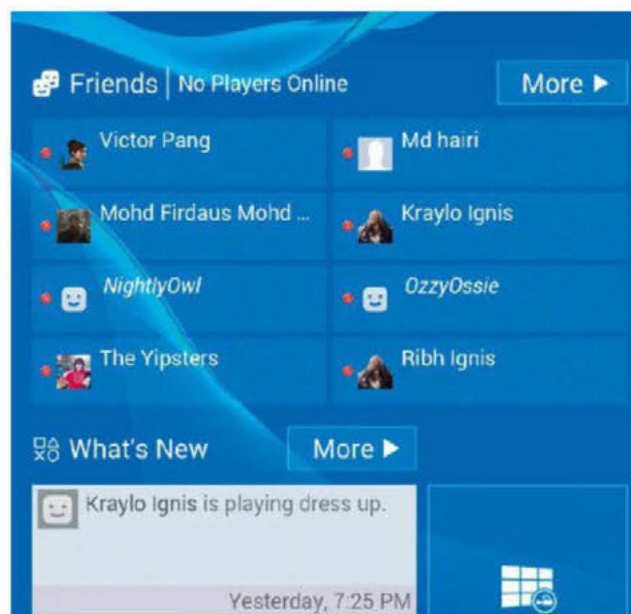
## THE PLAYSTATION APP

The PlayStation App though is available to everybody with a smartphone or tablet. You can get it from your device's app store and install it like you would any device. At its most basic level, it allows you to access some features of the PSN like notifications and messages as well as access the PSN store. There are other features on the second section of the app that but those mainly are glorified web links which open links to Sony's page. You can connect to your PS4 but it has to be on the same network as you, which means you can't access it if you're away from your PS4, but this allows you to use your phone as a second screen experience in certain games that support it. Arguably the most popular feature is that it transforms your second screen device into a touchscreen keyboard, which allows faster typing than on the controller.

The app is available to all smart devices, be it tablet or phones and you can simply download it from the whatever app store your device uses. Install it as you would any app but have your PSN credentials handy as you'll need them to log in. You can't use the PlayStation App on multiple accounts at once, so if you're on PSN with a multitude of accounts, you have log out and then log back in to change accounts.

## SECOND SCREEN

Near the bottom of the app, there's an icon called Connect to PS4. This only works if you're on the same network as the PS4, unlike the Remote Play app. You also need to be able to access the PS4 to setup the connection. On the PS4, go into Settings, then PlayStation App Connection Settings and select Add Device. There should be a new screen with your PS4 ID that pops up. Take note of that and log back in to the PlayStation App of your smart device. Log in and then select Connect to PS4 and when prompted, enter the number you got earlier. This will bind your device and your PS4. One important thing we have to stress. You **HAVE** to be on the same network to be connected.





## REMOTE PLAY

The second part of the Sony's second screen plans is Remote Play, which is only available on Xperia devices (Z2 and Z3 series only) as well as the PS Vita. Remote Play basically lets your PS4 stream its games onto your mobile screen. The processing is still done by the PS4, but you'll be able to play them as if they were running on your phone. You don't even need a PS4 controller if you have an Xperia phone.

**PS Vita:** Find the PS4 Link icon on the XMB. Select it. That's pretty much all there is to it. If you haven't connected to a PS4 before, you'll be asked to enter the authentication key similar to what happened with the PlayStation App. So you enter the key and that's it, your PS Vita is paired and ready for Remote Play. Remote Play will only work on Wi-Fi (and even then you need one with high speed) so if you have one of the PS Vita's with 3G, you won't be able to use it to connect.

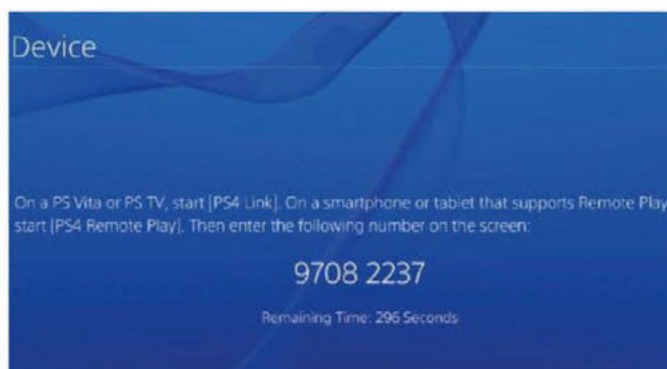
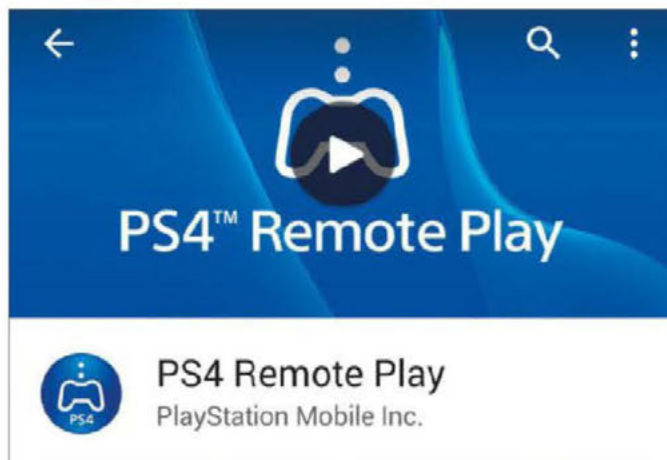
**Xperia devices:** If you're on a Xperia device, you need to visit the Google Play store to get the app. Search for 'Remote Play' and get the first one that pops up called PS4 Remote Play. Install it as you would any app and then run it normally.

Setup is similar to the PS Vita but we suggest you get all things ready on your Xperia device first. Navigate to Settings on the Xperia device and go to Settings > Video Quality for Remote Play. If you'll be playing on a network with high speed, put the video quality on high if not, leave it at medium.

There's not much of a noticeable difference between high or medium, especially if you're using an Xperia smartphone to play. Next you have to select what PS4 you connect to so hit the 'Change PS4 to Connect To' option on your Xperia device. Normally, it'd auto detect any PS4 on the same network but assuming it doesn't hit the 'Skip' button and follow the instructions and input the number code you get at the end.

Once you've set up all the permissions and tinkered around with the settings, start the Remote Play app on your Xperia device. As long as your PS4 is on or on standby mode, your Xperia device should be able to connect with no issue.

That's pretty much it. You're all set for Remote Play on your Xperia device.



## GAME CONTROLLER MOUNT

If you're using an Xperia Z2 or Z3 device to Remote Play, you might be interested in getting the GCM10 attachment from Sony. The GCM10 (Game Controller Mount), retails for RM99 and is available at most Sony stores. It'll clip on to your DualShock 4 and to your Xperia device via a suction mechanism. While there are cheaper third-party alternatives, Sony's is the only one (that we know of) that uses suction to keep your Xperia device secure. The third-party ones that we've seen all use hinges and screws to hold your device in place. Depending on your budget, you might want to go the cheaper route but the GCM10 seems to be a quality build and as specialized first party attachment goes, isn't too much of a rip-off.



# 3D PRINTING MADE EASY WITH MAKERBOT

by Azizul Rahman Ismail

The ability to create an object from almost nothing was the realm of science fiction. Even with the advent of 3D printers, it was entrenched to enterprises, hobbyists, and enthusiasts. That all changed with the MakerBot from Ricoh. With it, you can download an object schematic from the Internet and print it out in no time. Here is how we did it.

For demonstration, we used the 5th generation MakerBot Replicator. Measuring 52.8cm in length, 44.1cm in width, and 41.0cm in height, the Replicator can produce objects with the maximum dimensions of 25.2cm in length, 19.9cm in width, and 15.5cm in height.

The MakerBot Replicator prints using PLA, a bioplastic that melts at between 150 to 160 degrees Celsius. It comes in a variety of colors, from transparent to glow in the dark. This material is a favorite because it is a non-toxic resin made of sugar that's derived from field corn, has a semisweet smell when heated, and produces high-quality prints.

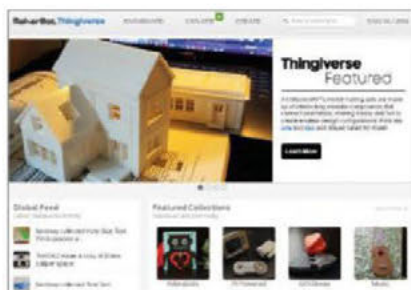
Before we begin, we must first load the PLA spool into the machine. The material is available in over 26 varieties and comes in spools of 900g, which is plenty for 3D printing. Here, we load up the MakerBot Replicator with translucent PLA.

The installation process is simple, just follow the onscreen instructions. First, we pull up the storage compartment, install the spool, thread the material through the tube, and finally feed the material into the extruder.

Don't worry about screwing up, the MakerBot's on-screen instructions will walk you through the process. Need more help? Just head on to the MakerBot channel on YouTube for video instructions.

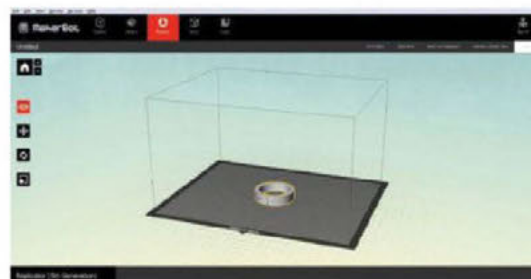
You don't need to be an engineer or a designer to create objects to print. The makers of MakerBot also developed Thingiverse, an open source online database of objects created by makers from all over the globe.

The objects available on Thingiverse range from the practical to the decorative, to just plain weird. For this demonstration, we decided on a Star Ring design. Just click the 'Download This Thing!' button and the 10.9KB compressed file containing the design of the Star Ring is in our folder and ready to be used.



Inside the compressed folder is an STL file. This is one of the many standard 3D design files used by 3D printers. The easiest way to use this file is to install the MakerBot Desktop software. It's free and incredibly easy to use.

You can set the print quality, dimensions, and other settings regarding the printing process right in the easy-to-use GUI. You can also choose the type of material you are using to print to get the best result. The software can also give you an estimation of how much material the object is going to need and how long the printing process will take.







The MakerBot Replicator can be connected to a PC via USB or Ethernet. Here, we went for the third option: USB drive. This 3D printer can print directly from a file loaded on a USB drive. The file we used here was a version edited using the MakerBot desktop software.

Before printing, the MakerBot Replicator preheats the extruder and performs an automatic calibration. This step is crucial for any 3D printer, and on the MakerBot Replicator, it is done without the need for complicated procedures or even user's assistance.



Printing starts as soon as it has completed its initial procedure. The Makerbot Replicator will first print a base on which to print on before moving on to the actual object. Total print time depends on the size of the object and the resolution at which the object is being printed at.

While printing, the MakerBot will display its progress, estimated time left in the process, and other statistics pertaining to the object being printed. In our case, the Star Ring took about 20 minutes to print.



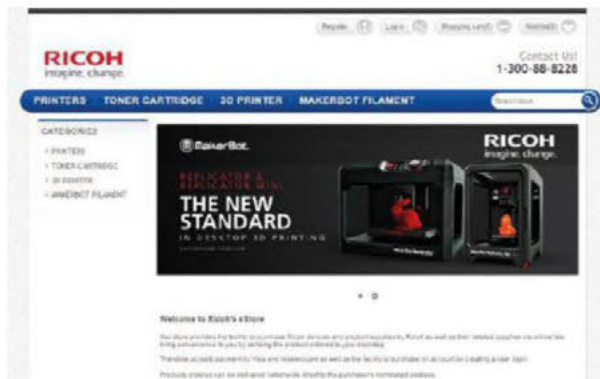
Once the printing is done, the extruder is lifted and the printing surface lowered. Although the printing process calls for the extruder to be at over 200 degrees Celsius, the object is cool to the touch.

The object must first be separated from the printing surface using a spatula or knife. A simple twist and pull then separates the ring from the base. The object can be further refined and finished by sanding and painting. Here, we simply took a marker to the ring to bring out the details of the embossed stars.



From website to the final output, the total process took approximately 30 minutes. It was simple, fast, and hassle free. It is the ease of use that placed MakerBot above its competitors in the market.

Want to get on of your own? It could not be simpler. Just visit [biz.ricoh.com.my/Ricoh-eStore](http://biz.ricoh.com.my/Ricoh-eStore) and you can have one delivered right to your doorstep. You could also purchase the PLA filament here as well.



# A GEAR AND A GALAXY (PART 2)

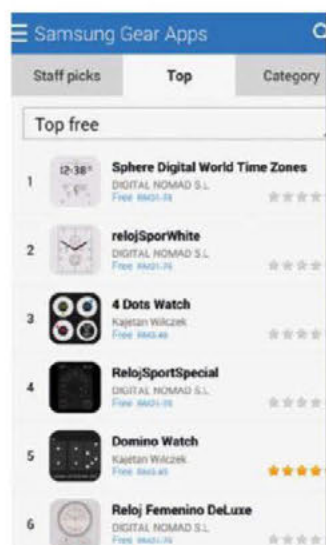
Some simple actions on how to use your Samsung Gear S.

by John Law

Previously, we took you through a step by step process, teaching you how to pair your Samsung Gear S with your GALAXY smartphone. In this issue, we'll teach you how to add and use your favorite apps on your smartphone directly to your Gear S.

## STEP 1: ENTER GEAR MANAGER VIA THE SMARTPHONE

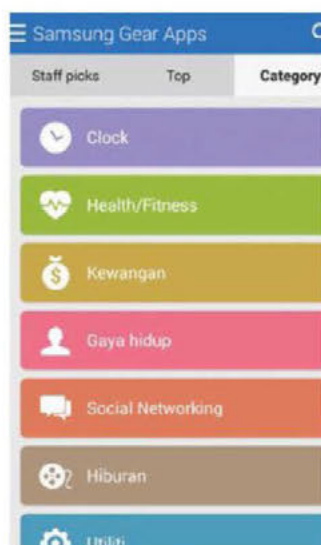
Obviously, you won't be able to download and install any apps directly from your Gear S. To start off, enter the Samsung Gear app, which you had downloaded previously.



You will see three tabs: Staff Pick, Top, and Category.

## STEP 2: CHOOSE THE CATEGORY TAB

Once you enter the app, you will see three different tabs listed on the screen: Staff Picks, Top, and Category. Choose the Category tab.



Select the Category Tab, and then, select the Watch category.



## STEP 3: CHOOSE CLOCK OPTION

On this screen, you will see all the possible app categories that you can choose from. For now, let us choose the Clock option.



Once you've chosen one, simply install it and it's on your Gear S!

## STEP 4: CHOOSE YOUR FAVORITE CLOCK FACE

Just as you would pick and choose your favorite app on Google Play with your smartphone, the same principles and actions can be applied here as well. Simply choose the watch face that you like from the list, install it, and your phone will automatically upload the new Clock Face to your Gear S!

As a reminder, the Samsung Gear app store isn't just a place to download Clock Faces only. There is a long list of other Gear S-related apps from different categories, such as apps for Banking, Social Networking, Health and Fitness, and many more.







## Monitoring your Activity via S Health



### STEP 1: ENTER THE GEAR S MENU

This app already comes pre-installed with Gear S, so there's no need to download from the Samsung Gear app. To make use of this app, simply enter the Gear S's menu. Once inside, scroll down until you see the S Health app. Choose the app by tapping on it.

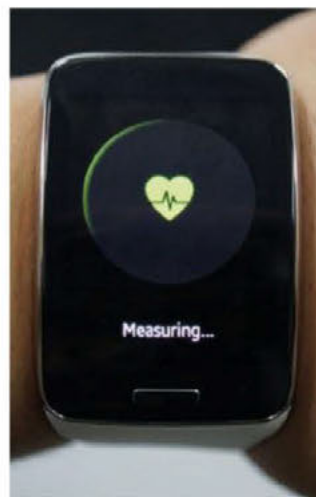


### STEP 2: SELECT WHICH HEALTH OPTION YOU WISH TO MONITOR

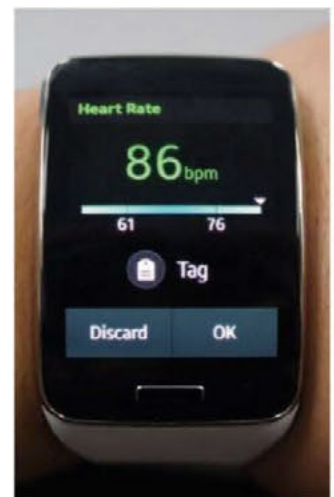
The S Health app is divided into five categories: Pedometer, Exercise, Heart Rate, Sleep, and UV Monitor. Tapping on each app will bring up a window that informs the users on how the sub-app functions. For this Learn, choose the Heart Rate option.



Choose the Heart rate monitor.



Wear the Gear S around your wrist, and press start...



...and now you have your heart rate! (It's a little high there)

### STEP 3: WEAR YOUR GEAR S

At this point, we assume that you're already wearing your Gear S around your wrist. While wearing the watch, tap the Start button located just beneath the display. Once tapped, the Gear S will begin to measure your heart rate. Within 10 seconds, the app will give you your current heart rate. From there, you can choose how to label your current heart rate at the time, or you can simply choose to discard the information, and redo the measurement again.

**Note:** As before, because of certain restrictions in Samsung products, the Gear S cannot be used with any other smart devices that isn't a Samsung GALAXY device, hence our use of the Samsung GALAXY S5 for this Learn.

# SECURITY BEGINS AT HOME

Setting up the Sharp Cloud SmartHome System.

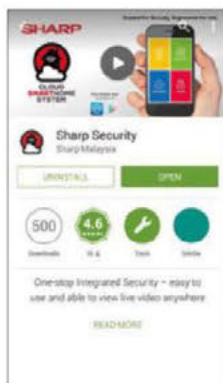
by Azizul Rahman Ismail

Convenient and complete security in a box, that is the promise of Sharp's Cloud SmartHome System. A first of its kind, it aims to give you a peace of mind in the most easy-to-setup package possible. Here, we take you through the few easy steps we took to get the system up and running.



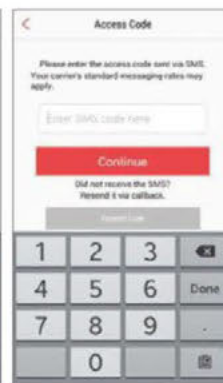
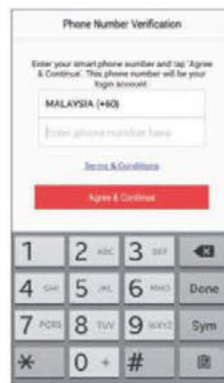
## 1) GET THE APP

First, download and install the Sharp Security app into your iOS or Android device from the Apple App Store or Google Play, respectively. This app will be your sole interface to the Sharp Cloud SmartHome System. For the purpose of this demonstration, we will use the Android version of the app.



## 2) REGISTRATION

When you first launch the app, it will ask for your phone number for verification. It will then send a code to your phone via SMS to verify who you are. This process ties your Sharp Cloud SmartHome System to your device and prevents others from hijacking it.



## 3) SETTING UP

After your phone number has been verified, the app will ask for a password, your email address and your name to set up your account. This account will become the administrator account and have full access to the Sharp Cloud SmartHome System without restrictions.



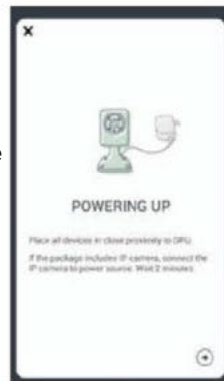
## 4) ACTIVATING THE OPU

The app will now prompt you to plug in the OPU and connect it to your home network using the included LAN cable. Note that both the adapter for the included HD IP camera and the OPU looks almost identical. Don't mix them up or you'll short the OPU.



## 5) ACTIVATING SENSORS

To activate the HD IP cameras and other sensors that came with the kit, install the included batteries or power them up using the included power adapter. Make sure that initially these cameras and sensors are no more than 1.5 meters away from the OPU.



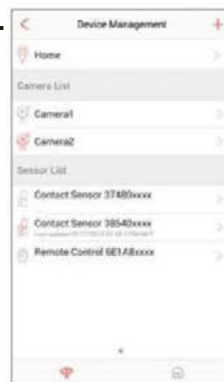
## 6) ADDING SENSORS

Sensors that came with the OPU and are placed close to it during activation will automatically be linked to the OPU and are ready to be used. However, additional sensors and devices could be added by scanning their QR codes. Sensors that have been added could be moved to any desired location as long as they are within the range of the OPU.



## 7) FULL CONTROL

Once you're done, you'll have full control of the Sharp Cloud SmartHome System via your device. From the app, you can add new users, arm the system, and more. But note the blue-colored option on the lower left. It hints at the possibility that the system could be used for more than just a security system in the future.



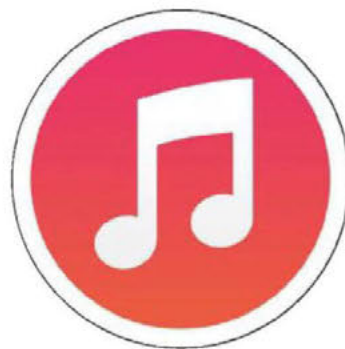


# MOVING YOUR MAC'S ITUNES LIBRARY TO AN EXTERNAL DRIVE

by *Kenny Yeo*

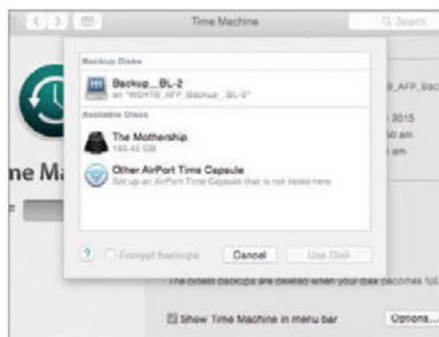
SSDs have never been more affordable and now is the time to upgrade. However, capacity is probably a stumbling block for most users. While 1TB hard drives are easy to come by and affordable, an equivalent 1TB SSD costs substantially more and is not for everyone. Furthermore, remember that most SSDs need to have around 15% to 20% of their capacity free to perform optimally.

This means that some form of drive maintenance and cleanup is necessary for most users who are transitioning from a mechanical hard drive. Fortunately, it is relatively simple to free up space by moving your entire iTunes library onto an external hard drive.



## 1) BACKUP

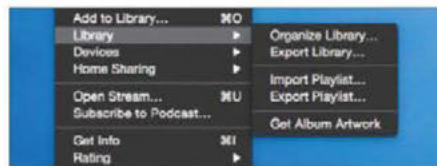
Before we begin, we recommend backing up all your data, just in case something goes wrong. It's good practice anyway. You can do so using Time Machine.



## 2) CONSOLIDATING FILES

Before we begin, we need to prepare the iTunes library by making sure all of your media files are in one place. You can do this by using the Organize Library function in iTunes.

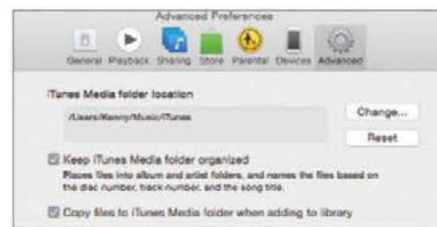
Open iTunes and click on "File" in the Menu Bar, then head to "Library" to find the "Organize Library" feature. Check the "Consolidate Library" option. This ensures all of your files are located in the iTunes Media folder. We are not using the second option because it might miss out on some files.



## 3) DOUBLE-CHECKING

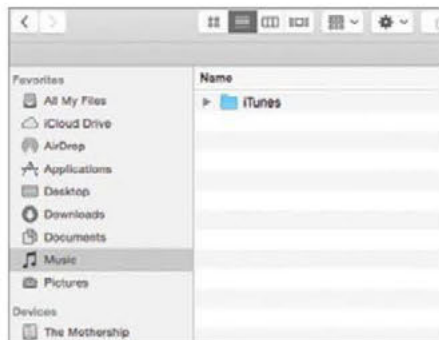
If you have moved your iTunes library in the past, it is best to double-check the location iTunes is using for accessing your library files. You can do this by going to the menu-bar and selecting "iTunes" and then "Preferences."

Then click on the "Advanced" tab, and you will be presented with the location of your iTunes Media folder. By default, it should be in the "Music" folder of your home directory.



## 4) MOVING THE FOLDER

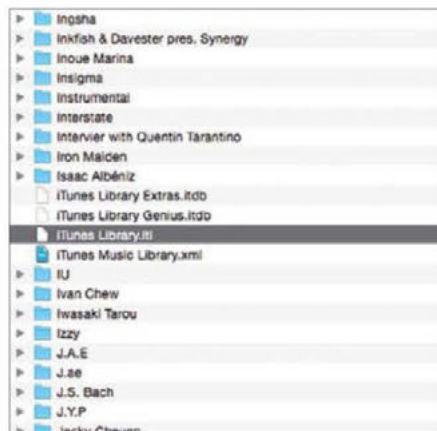
Now connect the external hard drive that you want to move your iTunes library to. Then open Finder and select the "Music" folder in the left sidebar. You should see a folder that is labelled "iTunes." Click and drag that folder onto the external hard drive icon on your desktop. Alternatively, if you want to move it to a specific folder on your external hard drive, you could also open another Finder window and go to the folder you want to move your iTunes library to and drag it there. Depending on how large your library is and the speed of your drives, it could take anywhere from minutes to hours.



## 5) REDIRECTING ITUNES

Once the copying process is complete, hold the Option key and open iTunes from the Dock or your Applications folder. A pop-up window will appear prompting you to create or choose your library. Select "Choose Library".

Now navigate to the iTunes folder that is in your external hard drive. Open it and scroll until you see the iTunes library file - "iTunes Library.itl." iTunes will now use that folder as the default folder for the library.



## 6) CLEANING UP

You can quit iTunes and delete your original "iTunes" folder in your home directory.

If you open iTunes without connecting the external hard drive with your iTunes library, iTunes will prompt you with an error message indicating that the library cannot be found. This can be fixed simply by connecting the external drive and reopening iTunes.

### WHY NOT COPY THE FILES YOURSELF?

Of course, one could also manually copy all the files over to external hard drive and then re-add them to iTunes. However, doing so will also mean losing all your metadata - information such as play counts, last-played dates, ratings, playlists and so on. Additionally, if you have not been diligently organizing your media, copying manually could mean missing out on some files. It's better to let iTunes organize for you first.

# BASIC TEXTURING WITH MAYA 2015

by Salehuddin Husin

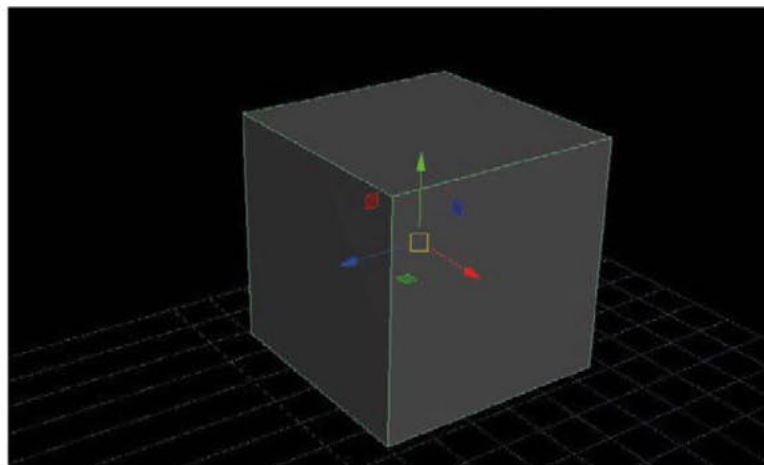
First off, note that this is just basic texturing. There are tons of in-depth ways to get texturing done (from UV mapping and such) but we'll just be touching on assigning materials as well as applying a texture to your models and then a simple bump map to polish things off.



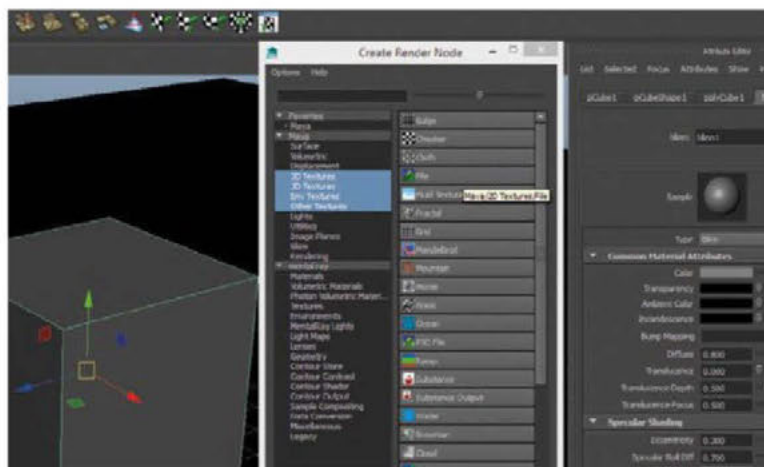
1) Create a model (or use one you have previously created) and click and hold the Right Mouse Button (RMB) on it. Select Assign Favourite Material. You'll see a few choices but the ones we'll be focusing on are the main ones; Blinn, Phong and Lambert.

Blinn is for metallic objects, Phong is for polished shiny surfaces (like plastic) and Lambert is for everything else. So depending on what kind of look you want your model to have, you have to pick one. Once you pick a material, you can then adjust various settings for it from how transparent it is to how luminous it can be. As always, experiment to find what suits you. For now, we're going with Blinn, on the default settings.

Once you've done that, you'll immediately notice that the right side's gotten additional tabs.

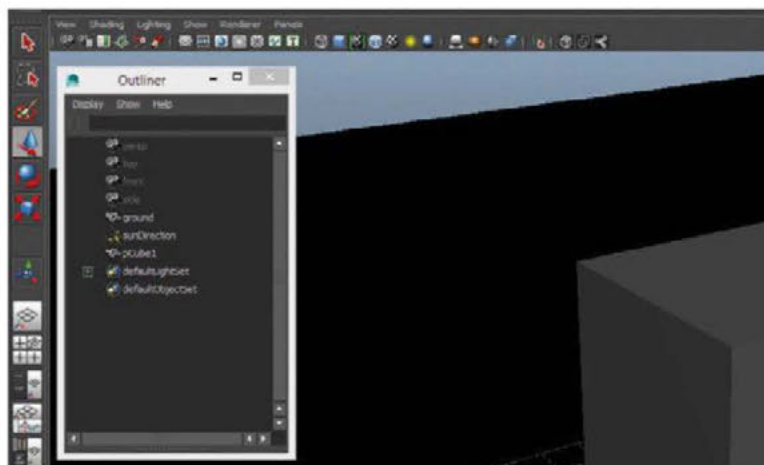


2) By default, the new tab will be called blinn1 to signify that it's a blinn material and it's the first of its kind. You can rename it if you want. Now look under the Common Material Attributes section, under Color. See the black and white box at the side? Click it. A whole bunch of choices will pop up.



3) Click File. You can ignore most of the options but some of them like Leather or Rock are great presets if you're making those items. Since you're not (probably), File lets you choose a texture file. Try to find a texture file that's as high quality as possible, at least go above 640 x 480 resolution. If not your textures will look ugly.

Once you click 'File', another tab will appear. Under File Attributes, there should be a folder icon, click it and you'll get to choose your file.





Congratulations, you just textured an object, added bump maps to it and rendered the result. Next time, we'll get to the final step, Animation.

# GAMES GAMES GAMES!

## Essential Gaming Companions

by Salehuddin Husin

We figured it was time to get back to basics this month. Sure, we may dabble in a game app or two but there hasn't been a game-centric App Attack in a while, which makes this one all the more needed. Oh yeah, everything's free to download so don't worry about the cost.



### EVOLVE: HUNTER'S QUEST

iOS, Android



Unlike some companion apps, there's no energy mechanic (where you need to wait to play), you can

play as much as you want and then transfer the experience you gain to the Evolve main game on consoles or PC. At its heart, the game is your typical match 3 puzzle in the vein of Puzzle Quest. Matching icons charge skills which unleash different effects when used. It's fun and quite lengthy and the fact that you can play as much as you want without penalty makes it a pretty good deal.

### DYING LIGHT: COMPANION

iOS, Android



Unlike the Evolve app, Dying Light: Companion requires you to have the main game and have a registered

account (made from within the main game) before you can play. It's free but it's more of a thing you can check in every few hours rather than play. The companion app allows you to send scouts on missions for items which you can then use in the main game, offering little variety other than choosing what mission and who to send. It's better than nothing, especially if you're hooked on the main Dying Light game.

### THE WITCHER: BATTLE ARENA

iOS, Android



Battle Arena isn't tied to any Witcher game but it's a free MOBA. We figured with Witcher 3 being delayed,

Witcher fans need something Witcher related to tide them over and Battle Arena fits the bill. While the controls and balance could use a bit of tweaking, the game's pretty decent, especially if you're a fan of the genre. You can unlock everything by playing (a whole lot) so there's really no advantage to paying other than getting characters and skins faster. It takes a pretty beefy phone to run it full throttle though.

### ASSASSIN'S CREED UNITY: COMPANION

iOS, Android

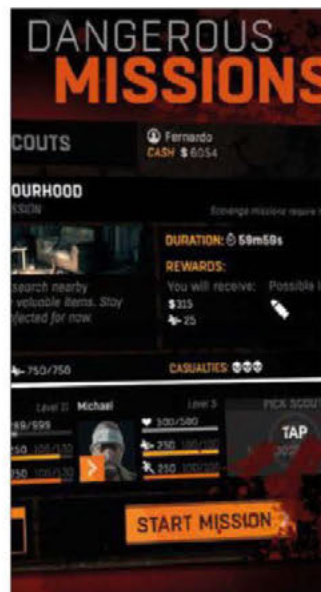


Unity will forever be the game that tarnished the Assassin's Creed name. But if you're one of the few who

play the game, this companion app is a must. Gameplay's similar to the Dying Light app (you need to send assassins out on missions) except here you also have to solve incredibly frustrating puzzles using a sonar-like mechanic. The only reason we're talking about the app is that it's a must if you're somebody who wants to 100% the game, as the app is the only way to unlock otherwise unobtainable costumes and items.



Merge three or more icons to do damage to your enemy.



Send your scouts out on missions and wait for the results.



Familiar characters from the games join all-new ones.



You basically need to play the game to get everything there is to get in Unity.



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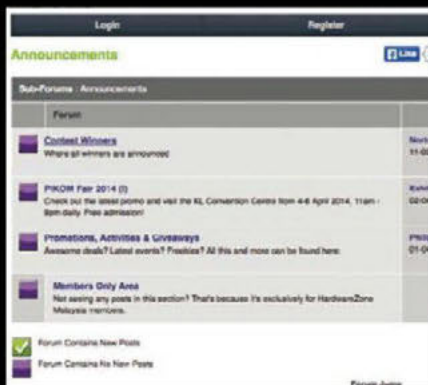
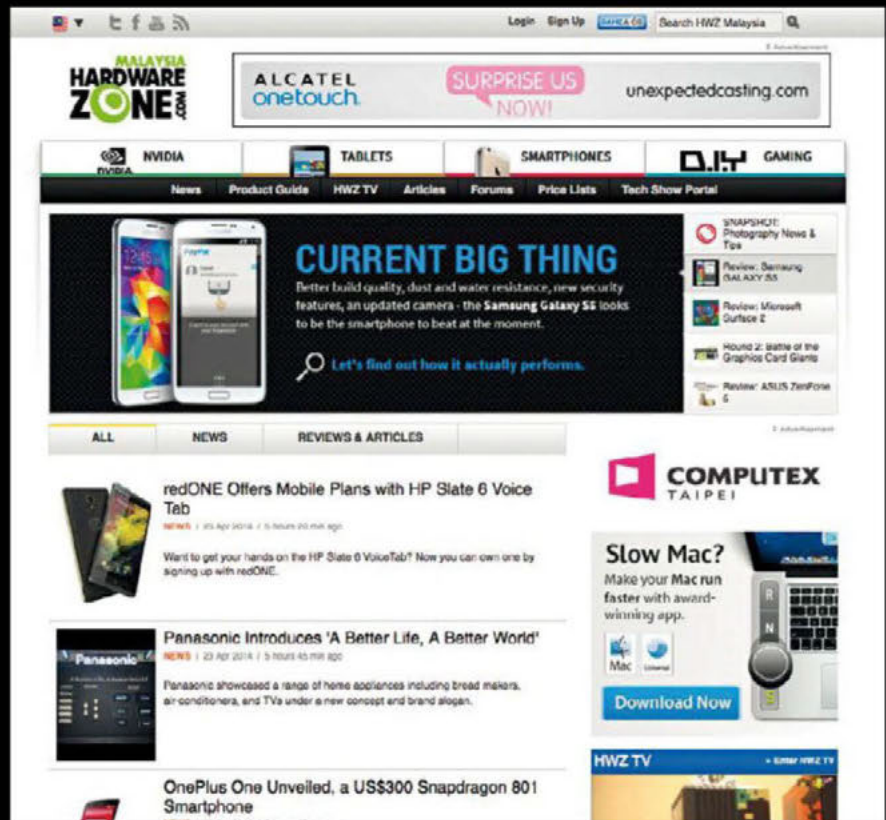
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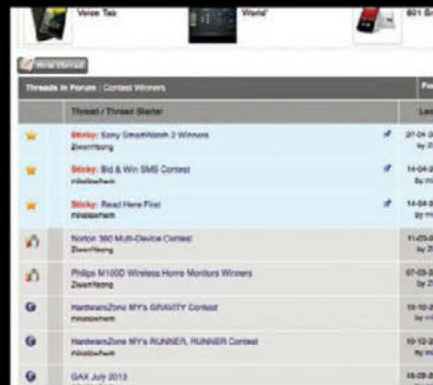


# HWM MALAYSIA CONTEST WINNERS!

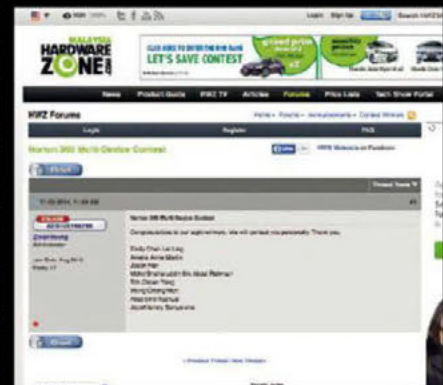
Did you join one of our contests? Not sure if you've won? To find out, head on over to our new HardwareZone Malaysia site @ [hardwarezone.com.my](http://hardwarezone.com.my) and check out our new Forum (on the top navigation bar).



There you'll find Contest Winners.



Click on it and you'll see the list of contests we have had – explore them to find if your name is there!



If it is, see how you can claim your prizes!

**Congratulations to all our lucky readers and for those who didn't win anything – keep trying as we have new contests every month! Good luck!**

Probably Nikon's last great split-body camera, the 4MP COOLPIX 4500 was launched in 2002. It had successors in the COOLPIX S4 and S10, but the camera industry had already moved on.



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